SITE PLAN REVIEW COMMITTEE MEETING AGENDA

MONDAY, JULY 13, 2026 AT 1:30 PM

COUNCIL CHAMBERS, SECOND FLOOR, MUNICIPAL BUILDING, 106 JONES STREET, WATERTOWN, WI 53094

---

1. **CALL TO ORDER**
2. **APPROVAL OF MINUTES**
   - A. Review and take action: Site Plan Review minutes dated June 22, 2026
3. **BUSINESS**
   - A. Review and take action: 1224 American Way Site Plan review – Watertown Hops
   - B. Discussion & Concept Review: 245 S. Concord Avenue – Proposed redevelopment
4. **ADJOURNMENT**

Persons requiring other reasonable accommodations for any of the above meetings, may contact the office of the City Clerk at cityclerk@watertownwi.gov phone 920-262-4000

A quorum of any City of Watertown Council, Committee, Board, Commission, or other body, may be present at this meeting for observing and gathering of information only

SITE PLAN REVIEW COMMITTEE
June 22, 2026

The Site Plan Review Committee met on the above date at 1:30 P.M. in the Council Chambers on the second floor of City Hall. The following members were present: Mayor Robert Stocks, Mike Jacek – Building Inspection, Laura Bohlman – Police, Stacy Winkelman – Streets & Solid Waste, Maureen McBroom – Stormwater, and Manager of Economic Development and Strategic Initiatives Deb Sybell.

Also in attendance were Nikki Zimmerman – Building Safety & Zoning, and Glendon Griesbaum of Niemann Foods, Inc.

1. **Call to Order**
   The meeting was called to order by Chairperson Brian Zirbes.

2. **Approval of Minutes**
   A. **Review and take action: Site Plan Review Minutes Dated June 8, 2026**
   Motion was made by Mike Jacek and seconded by Laura Bohlman to approve the minutes as submitted. Unanimously approved.

3. **Business**
   A. **Review and take action: 401 Bernard Street Site Plan Review**
   Applicant Glendon Griesbaum of Niemann Foods, Inc. was present virtually. This is to amend a building site plan previously approved in September of 2025. The updated plan will now include a total of 5 tenant spaces up from the previously approved 3. The tenant spaces will include Ace Hardware, Pets Supplies Plus, and three other future tenant spaces.

   The following was presented by staff:

Fire:	Not present but had no concerns.
Building:	More detailed plans of each space would be required for building permit approval. Each tenant will need access to panels or have their own electric panels. There may be additional requirements once detailed plans are submitted for approval.
Police:	No concerns.
Mayor:	No concerns.
Stormwater:	Since all of the work will be occurring inside the building, there are no concerns. If any work occurs in the parking lot or in the exterior space around the building, Stormwater Project Manager Maureen McBroom should be contacted.
Engineering:	Not present but had no concerns.
Zoning:	No concerns.
Parks & Rec:	Not present but had no concerns.
Water/Wastewater:	Not present but had no concerns.
Streets/Solid Waste:	No concerns.
Econ. Development:	No concerns.

   Motion was made by Mayor Stocks and seconded by Maureen McBroom to approve this item with no conditions.

   Unanimously approved.

   B. **Review and take action: 1400 W. Main Street Site Plan Review – Tree-Ripe Fruit Co.**
   Tree-Ripe Fruit Co. is requesting permission for general temporary outdoor sales to sell fruit from a semi-truck in the Farm & Fleet parking lot during various dates in 2026.

The following was presented by staff:

Fire:	Not present but had no concerns.
Building:	No concerns.
Police:	No concerns.
Mayor:	No concerns.
Stormwater:	No concerns.
Engineering:	Not present but had no concerns.
Zoning:	No concerns.
Parks & Rec:	Not present but had no concerns.
Water/Wastewater:	Not present but had no concerns.
Streets/Solid Waste:	No concerns.
Econ. Development:	No concerns.

Motion was made by Stacy Winkelman and seconded by Mike Jacek to approve this item with no conditions.

Unanimously approved.

C. **Adjournment**
Motion was made by Mike Jacek and seconded by Laura Bohlman to adjourn. Unanimously approved.

Respectfully submitted,
Nikki Zimmerman, Recording Secretary

Note: These minutes are uncorrected, and any corrections made thereto will be noted in the proceedings at which these minutes are approved.

City of Watertown

Solar Project Narrative

PROJECT SUMMARY

The Solar Now Program is a state approved voluntary renewable energy program that enables We Energies electric customers to not only increase their use of renewable energy from sources such as wind and solar, but also to reduce greenhouse gas emissions produced by fossil fuels.

SunVest Solar LLC will design and construct the PV array, using several of their subcontractors for various aspects of construction. We-Energies will own, operate and maintain the solar PV array renewable energy output through the Solar Now program to help support their environmental goals. For this specific project, We Energies will lease a portion of the property for 25 years with an additional five-year extension option. We-Energies will be responsible for all maintenance and repairs to the array, including vegetation management within the safety fence, and assets used for distribution interconnection.

PROPERTY PARCEL IDENTIFICATION NUMBERS

291-0815-0713-001

PROPERTY OWNER

MILLERCOORS, LLC

1224 American Way

Watertown, WI 53094

SURROUNDING PARCEL LAND USES

North - Unimproved

South - Unimproved

East – Unimproved - Johnsonville Sausage LLC

West – Unimproved

PROJECT FEATURES

Site improvements will consist of photovoltaic solar panels installed on a fixed-tilt racking systems. The total system size is 2.5 MW of AC capacity. The racking system is comprised of galvanized steel beams, pile driven 10’ 6” into the ground. No concrete is anticipated to be used for the support system. The overall height of the system will be 11’ at its tallest point, with a 3’ ground clearance to the bottom edge of the module (See Fig 1 for a cross-section).

All electrical cables will be buried throughout the project area. The installer will be NABCEP Certified. Foundations will be certified by a qualified engineer and the access route to the solar project will have a

Pavement Surface Evaluation and Rating prior to the issuance of a Building Permit. In addition, the solar project will comply with all applicable local, state, and federal regulatory codes including the State of Wisconsin electrical and plumbing codes and the National Electrical Code.

SOUND

The project inverters, motors and other noise emitting equipment collectively will not exceed the Public Service Commissions mandated maximum nighttime sound levels.

SITE ACCESS

Access to the site will be from an 16' wide entrance located on the south side of the property onto Perry Way. Off-street parking will be provided for vehicles inside of the project area.

IMPACT TO ADJACENT EXISTING AND FUTURE LAND USES

The solar facility is specifically designed to minimize impact to the land while complying with all required setbacks, height restrictions, and zoning ordinances of the City of Watertown. The solar array will have minimal to no impact on adjacent land use. This site was chosen to minimize land use that has little development potential.

STORM WATER RUNOFF MANAGEMENT

Storm water management will be handled on-site and will comply with all requirements set forth in local, County and State regulations. Approved DNR storm water NOI study will be submitted at the time of Building Permit application and the design will address all requirements as necessary. Temporary erosion control measures will be in place during construction. Silt fencing and sediment logs for this project are detailed on the attached erosion control plan that is part of the construction drawing set. The final planting of a native grass community is a best practice and will help effectively manage the stormwater runoff. Native grasses have deep root systems that disperse the water so there is very little to no concentrated run-off.

SCREENING

A Landscape screening of evergreen trees and shrubs will be maintained along Perry Way to provide a vegetative buffer to the existing homes southeast of the solar facilities.

VEGETATION MAINTENANCE

After the construction of the solar array, the site will be planted with a low growing native prairie seed mix. Regular bi-annual maintenance will ensure the site is kept weed free. We-Energies will be responsible for restoring the land affected by construction. After the end of the term, We-Energies will decommission the array and restore the land to its previous condition as required in the Lease agreement.

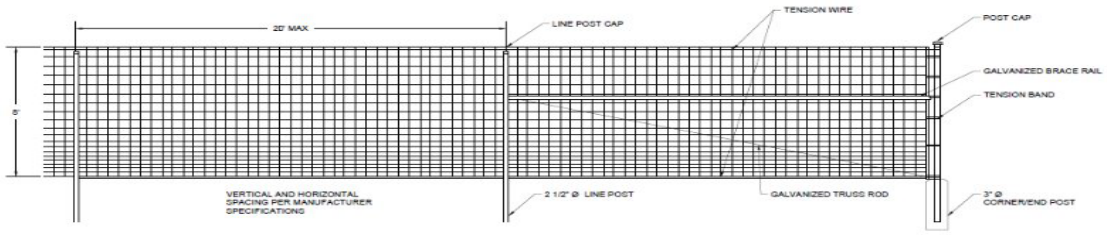
IMPACT TO THE GENERAL PUBLIC'S HEALTH, SAFETY AND WELFARE

Solar facilities generally have little to no impact on surrounding properties health and safety and do not impede the welfare of the surrounding area. They are quiet, dust free, smoke and odor free. Solar modules are designed to minimize glint and glare by absorbing light to produce electrical energy while not reflecting it. The entire site will be secured by a fence that will control access to the facility and keep the general public safe. The top glass on the modules has an anti-glare coating. The electrical inverter equipment used on-site is FCC part 15 Class A certified, providing assurance that there will be no interference with radio, TV, internet, or telecommunications. All electrical equipment and construction follow the NEC2017 code requirements, the racking is designed to withstand 105 mile per

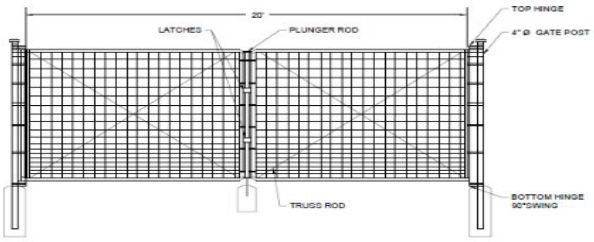
hour winds and includes safety features to shut down the facility in event of a system fault. Lastly, Sunvest will also work with the local emergency responders that serve the area for training on system components, and additional training materials for how to safely address concerns on a solar site. We Energies has a positive track record with SunVest installing solar arrays throughout Wisconsin. Together we have installed over 23 arrays and have another three projects under construction. We have experienced no health and safety issues with the public.

FACILITY SECURITY

The facility will be surrounded by an 8' tall agricultural Knot fence with a locked gate to prevent access from unauthorized persons. All major electrical equipment will be individually locked and warning signage is on-site to identify specific dangers.



1 8' FIXED KNOT FENCE
NTS



2 8' FIXED KNOT FENCE GATE
NTS

LIGHTING AND BUILDINGS

No lighting or buildings are planned at this facility.

STRUCTURAL DETAIL DRAWING

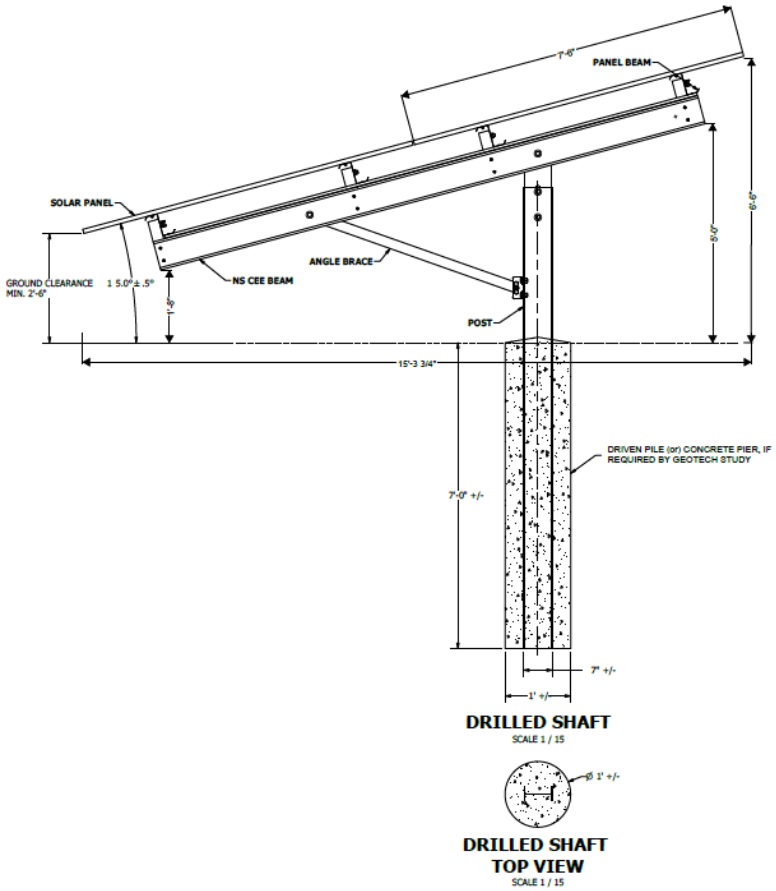


Figure 1 – Snip from the racking construction drawings showing a cross-section of the racking, above and below grade.

Figure 2 - Example of a solar array

CONSTRUCTION ACTIVITIES

It is anticipated that 10 to 15 full time employees will be on site in the early stages of construction. This will taper off to a team of approximately 10 members toward the end of the construction activities. Typically, there will be a vehicle for each worker, approximately three (3) utility vehicles (UTV's) for transferring equipment around the site, and forklifts needed to perform different construction tasks. Vehicles will be parked on the site access road that will be built to connect to the array. Hours of operation may take place 6am to 7pm Monday through Saturday and 10:00 am to 7:00pm on Sunday, but will not take place on state legal holidays. The total construction will take approximately 12-16 weeks. The first two (2) weeks will consist of pile driving with the balance of the construction timeline used for erecting the racking, panels and electrical equipment. Dust will be mitigated through the use of a water truck as needed.

Example array construction showing pile being driven (left) and racking before module install (right)

OPERATIONS & MAINTENANCE

The site will be monitored remotely with 24/7 alerts via a SCADA system and wireless phone connection. Annual preventative maintenance will take place each spring to ensure the facility is operating at its full capabilities and to proactively identify issues before they arise. Landscaping will be performed on an as needed basis to keep the low growth vegetation in check. This will be limited to a crew of 1-2 electrical personnel in a passenger vehicle performing annual maintenance checks and replacing equipment as needed.

WATERTOWN HOPS
1224 AMERICAN WAY, WATERTOWN, WI 53094
(43.176897, -88.761446)

PV SYSTEM DETAILS

ARRAY TYPE:	FIXED TILT
DC SYSTEM SIZE:	2.58542 MW DC
DC SYSTEM VOLTAGE:	1000 V
AC SYSTEM SIZE:	2.25 MVA @PF=1
MODULES	(3,554) TRINA TSM-DE15H(II) 400W
INVERTERS:	SOLAREDGE, (22) SE100KUS, (1) SE40KUS, (1) SE10KUS
OPTIMIZERS:	(1,777) SOLAREDGE, P960, 2:1
RACKING:	DCE
CLAMPS:	N/A
AZIMUTH:	180°
ARRAY PITCH:	25°
ARRAY TILT TRINA:	27'-8" CENTER SPACING (TRINA 400W)
ARRAY TILT HELIENE:	31'-2" CENTER SPACING (HELIENE 595W)
DC/AC RATIO:	1.149

INSPECTION ITEMS

CONTRACTOR SHALL STRICTLY ADHERE TO THE FOLLOWING CODE STANDARDS UNCLES OTHERWISE NOTED WITHIN THE DRAWING; NEC. 2017, IBC. 2015, IFC. 2015 AND APPLICABLE LOCAL CODES.

PROGRESS INSPECTIONS:

ROUGH ELECTRIC:	☐ REQUIRED	☐ NOT REQUIRED
ROUGH BUILDING:	☐ REQUIRED	☐ NOT REQUIRED

FINAL INSPECTIONS:

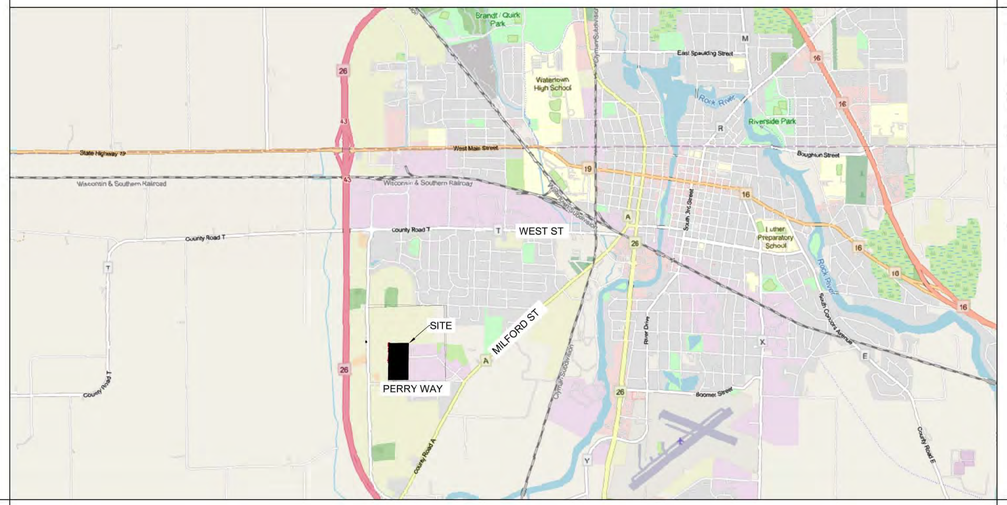
ELECTRIC:	☐ REQUIRED	☐ NOT REQUIRED
BUILDING:	☐ REQUIRED	☐ NOT REQUIRED
OTHER:	☐ REQUIRED	☐ NOT REQUIRED

CONTRACTOR SHALL BE KNOWLEDGEABLE OF ANY LOCAL AHJ INSPECTIONS REQUIRED NOT LISTED.

SUNVEST SOLAR LLC®
N27 W24025 PAUL CT. SUITE 100
PEWAUKEE, WI 53072
PHONE: (262)-547-1200
WWW.SUNVEST.COM

CIVIL ENGINEER STAMP:

LOCATION MAP



NOTES

1. THE APPLICANT PROPOSES TO INSTALL PV MODULES AND WEATHER PROOF EQUIPMENT FOR AN UNMANNED FACILITY.
2. EQUIPMENT IS UNMANNED AND NOT FOR HUMAN HABITATION, HANDICAP ACCESS IS THEREFORE NOT REQUIRED.
3. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. NON-CONFORMING CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
4. INCORRECTLY FABRICATED, DAMAGED OR OTHERWISE MISFITTING OR NON-CONFORMING MATERIALS OR CONDITIONS SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER AND DEVELOPER FOR REMEDIAL OR CORRECTIVE ACTION.
5. DEVELOPMENT AND USE OF THE SITE WILL CONFORM TO ALL APPLICABLE CODES AND ORDINANCES.

DISCLAIMER

IT IS A VIOLATION OF THE LAW FOR ANY PERSON UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER TO ALTER THIS DOCUMENT. UNLESS EXPLICITLY AGREED TO BY THE ENGINEER IN WRITING, THE ENGINEER DISCLAIMS ALL LIABILITY ASSOCIATED WITH THE REUSE, ALTERATION OR MODIFICATION OF THE CONTENTS HEREIN.

ISSUANCE:
PRELIMINARY CIVIL PLANS

LICENSED ELECTRICAL ENGINEER certifies that they prepared all the electrical "E" sheets in this drawing set.
LICENSED STRUCTURAL ENGINEER certifies that they prepared all of the structural "S" sheets in this drawing set.
LICENSED CIVIL ENGINEER certifies that they prepared all of the civil "C" sheets in this drawing set.
It should be noted that any plan sheets not identified above have been prepared and certified by others and have been included herein for informational purposes only.

SITE INFORMATION

PROPERTY OWNER: WATERTOWN HOPS

POWER COMPANY: WE ENERGIES

PROJECT MANAGER: TBD PHONE:

FENCE LINEAR FEET: 3,855' LF

APPROXIMATE SITE ACREAGE: 10.27 ACRES

GEOLOCATION COORDINATES: TBD COORDINATE SYSTEM: TBD

AERIAL MAP

DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE DEVELOPER OR ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

DRAWING INDEX

DWG NO:	SHEET TITLE
C-1.00	TITLE SHEET
C-1.01	GENERAL NOTES AND SYMBOLS
C-2.00	GENERAL NOTES
C-3.00	EROSION CONTROL PLAN
C-4.00	CIVIL SITE & GRADING PLAN
C-5.00	CIVIL DETAILS
C-5.01	EROSION CONTROL DETAILS

10		21	
9		20	
8		19	
7		18	
6		17	
5		16	
4		15	
3		14	
2		13	
1		12	
0	6/19/26	11	
REV	SET/DATE	REV	SET/DATE

DRAWN BY: CHECKED BY:
SCALE: AS NOTED JOB NO:

WATERTOWN HOPS

SHEET TITLE
TITLE SHEET

DWG. NO.
C-1.00

CIVIL LEGEND:

- PARCEL BOUNDARY
- PARCEL SETBACKS
- ARRAY FENCE
- WETLANDS
- WETLAND SETBACK
- FEMA 100-YR FLOOD ZONE
- FLOODPLAIN SETBACK
- BUILDING
- BUILDING SETBACK
- DRAIN TILE
- ACCESS ROAD
- ACCESS GATE
- CONCRETE EQUIPMENT PAD
- DEMOLITION AREA
- COMPOST FILTER SOCK
- SILT FENCE
- LIMIT OF DISTURBANCE (LOD)
- SEEDING

ELECTRICAL LEGEND:

- LV CONNECTION/TERMINATION
- MV LIVE-FRONT BUSHING/TERMINATION
- MV DEAD-FRONT BUSHING/ TERMINATION
- MEDIUM VOLTAGE- UNDERGROUND
- OHE — EXISTING OVERHEAD CONDUCTORS
- DC CONDUCTORS- ABOVE GROUND
- AC — AC CONDUCTORS ABOVE GROUND
- DC CONDUCTORS- UNDERGROUND
- AC CONDUCTORS- UNDERGROUND
- COMMUNICATION
- INVERTER STRINGING (11 STRINGS)
- INVERTER STRINGING (12 STRINGS)
- INVERTER STRINGING (13 STRINGS)
- DC — DC TRENCHING
- C — AC TRENCHING
- POWER UNDERGROUND
- POWER OVERHEAD
- MODULE
- TORQUE TUBE
- UTILITY/CUSTOMER POLES
- INVERTER RACK
- MAIN SWITCHBOARD
- TRANSFORMER
- TRACKER MOTOR
- DC COMBINER BOX
- AUXILLARY TRANSFORMER
- (2/3/4 STRING) MODULE TRACKER

ELECTRICAL GENERAL NOTES/REQUIREMENTS:

1. SEE ELECTRICAL DRAWINGS.

CIVIL NOTES/REQUIREMENTS:

CIVIL GENERAL NOTES

1. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LOCAL ZONING, PERMITTING, AND ENVIRONMENTAL REGULATIONS.
2. CONTRACTOR SHALL UTILIZE ALTA SURVEY BENCHMARKS TO VERIFY SITE BOUNDARIES AND SETBACK REQUIREMENTS PRIOR TO ANY CONSTRUCTION ACTIVITY.
3. CONTRACTOR SHALL VERIFY EXISTING SITE CONDITIONS AND NOTIFY SUNVEST IMMEDIATELY OF ANY DISCREPANCIES BEFORE PROCEEDING.
4. CONTRACTOR SHALL MAINTAIN UP-TO-DATE COPIES OF ALL PERMITS AND APPROVALS ON-SITE AND MAKE THEM AVAILABLE FOR INSPECTION UPON REQUEST.
5. ALL SUBCONTRACTORS SHALL BE BOUND TO THE SAME STANDARD AND REQUIREMENTS HEREIN.
6. A PRECONSTRUCTION MEETING SHALL BE SCHEDULED BY THE CONTRACTOR WITH ALL STAKEHOLDERS TO REVIEW ACCESS, SCOPE LIMITS, SAFETY, AND SEQUENCING.
7. CONTRACTOR SHALL MAINTAIN A DAILY LOG OF SITE ACTIVITIES, WEATHER CONDITIONS, AND NOTABLE INCIDENTS.

SITE PREPARATION

1. CONTRACTOR SHALL PERFORM GRADING AS REQUIRED TO MAINTAIN PROPER SITE DRAINAGE.
2. CONTRACTOR SHALL FOLLOW ALL GEOTECHNICAL ENGINEER RECOMMENDATIONS FOR COMPACTION, GRADING, STABILIZATION, MATERIAL SELECTION, ETC.
3. CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES, INCLUDING SILT FENCING AND SEDIMENT TRAPS, PER STORMWATER MANAGEMENT REQUIREMENTS.
4. CONTRACTOR SHALL CONSTRUCT ACCESS ROADS IN ACCORDANCE WITH GEOTECHNICAL RECOMMENDATIONS. FINAL ROAD CONSTRUCTION SHALL MEET PROJECT SPECIFICATIONS.
5. CONTRACTOR SHALL CLEAR VEGETATION ONLY WITHIN DESIGNATED WORK LIMITS AND ADHERE TO ALL PERMIT CONDITIONS REGARDING TREE REMOVAL.
6. CONTRACTOR SHALL STOCKPILE AND PROTECT TOPSOIL FOR USE IN FINAL SITE RESTORATION, UNLESS OTHERWISE DIRECTED BY CIVIL ENGINEER OF RECORD.
7. CONTRACTOR SHALL IMPLIMENT DUST CONTROL MEASURES AS REQUIRED TO MINIMIZE AIRBORNE PARTICULATES.
8. ANY IMPORTED FILL SHALL MEET PROJECT SPECIFICATIONS & BE APPROVED BY CIVIL ENGINEER OF RECORD.

FOUNDATION & STRUCTURAL

1. CONTRACTOR SHALL INSTALL DRIVEN OR HELICAL PILES IN COMPLIANCE WITH ASTM D1143 AND D3966 LOAD TESTING REQUIREMENTS.
2. CONTRACTOR SHALL DESIGN AND IMPLEMENT SETTLEMENT MITIGATION STRATEGIES TO ACCOMMODATE LONG-TERM SUBSIDENCE.
3. CONTRACTOR SHALL APPLY FROST HEAVE PREVENTION MEASURES AS REQUIRED FOR FROST-PRONE SOILS.
4. CONTRACTOR SHALL ENSURE PILE DRIVING EQUIPMENT AND PROCEDURES MINIMIZE VIBRATION AND NOISE IN ACCORDANCE WITH AHJS.
5. CONTRACTOR SHALL RECORD PILE REFUSAL DEPTHS AND SUBMIT A PILE LOG SUMMARY FOR REVIEW.
6. ALL STRUCTURAL ELEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTERER TOLERANCES AND STAMPED DESIGN DRAWINGS.
7. WHERE BEDROCK OR OBSTRUCTION IS ENCOUNTERED, CONTRACTOR SHALL PROPOSE ALTERNATE FOUNDATION SOLUTIONS AND OBTAIN WRITTEN APPROVAL BEFORE PROCEEDING.

STORMWATER MANAGEMENT

1. CONTRACTOR SHALL ADHERE TO LOCAL DETENTION/RETENTION/SEDIMENT POND SIZING REGULATIONS AND CONFIRM COMPLIANCE WITH MUNICIPAL STORMWATER ORDINANCES.
2. CONTRACTOR SHALL INSPECTA ND MAINTAIN ALL EROSION AND SEDIMENT CONTROL DEVICES WEEKLY AND AFTER SIGNIFICANT RAINFALL (AS DETERMINED BY AHJ).
3. DEWATERING SHALL COMPLY WITH NPDES PERMIT CONDITIONS AND AVOID SEDIMENT-LADEN RUNOFF.
4. STORMWATER BMPS SHALL REMAIN IN PLACE AND FUNCTIONAL UNTIL FINAL SITE STABILIZATION IS ACHIEVED AND APPROVED.
5. CONTRACTOR SHALL ENSURE CULVERTS AND DRAINAGE CHANNELS ARE PROPERLY SIZED AND INSTALLED PER APPROVED PLANS.
6. CONTRACTOR SHALL INSTALL TEMPORARY STORMWATER BEST MANAGEMENT PRACTICES, INCLUDING BUT NOT LIMITED TO: CHECK DAMS, SWALES, SILT FENCE, COMPOST FILTER SOCK, & OTHER BMP'S AS REQUIRED BY AHJ & AS DEEMED NECESSARY DURING CONSTRUCTION.

UTILITY COORDINATION

1. CONTRACTOR SHALL COORDINATE TRENCHING AND CONDUIT INSTALLATION WITH ELECTRICAL SUBCONTRACTORS TO ENSURE COMPLIANCE WITH INTERCONNECTION REQUIREMENTS.
2. CONTRACTOR SHALL SCHEDULE UTILITY LOCATES (811 OR STATE EQUIVALENT) A MINIMUM OF 72-HOURS PRIOR TO EXCAVATION.
3. ALL UNDERGROUND CONDUIT AND WIRING SHALL BE INSTALLED WITH DETECTABLE WARNING TAPE AND TRACER WIRE UNLESS OTHERWISE NOTED.
4. CONTRACTOR SHALL VERIFY DEPTH, SEPARATION, AND LAYOUT OF ELECTRICAL TRENCHES PER ELECTRICAL DESIGN DRAWINGS.
5. CONTRACTOR SHALL LOCATE AND MARK ALL EXISTING UNDERGROUND UTILITIES BEFORE COMMENCING EXCAVATION ACTIVITIES.

ENVIRONMENTAL & PERMITTING

1. CONTRACTOR SHALL FOLLOW ALL ENVIRONMENTAL IMPACT ASSESSMENTS AND MAINTAIN REQUIRED SETBACKS FOR WILDLIFE PROTECTION AND WETLAND AREAS.
2. CONTRACTOR SHALL PROVIDE TRAINING TO ALL WORKERS ON APPLIVABLE ENVIRONMENTAL AND PERMITTING CONSTRAINTS PRIOR TO SITE ENTRY.
3. ALL SPILLS OR RELEASES SHALL BE IMMEDIATELY CONTAINED AND REPORTED TO SUNVEST AND APPROPRIATE REGULATORY AGENCIES AS REQUIRED.
4. CONTRACTOR SHALL IMMEDIATELY HALT WORK AND NOTIFY SUNVEST IF ANY HISTORICAL OR ARCHEOLOGICAL ARTIFACTS ARE ENCOUNTERED.
5. NOISE, LIGHT, AND OTHER TEMORARY CONSRUCTION IMPACTS SHALL BE MINIMIZED TO MEET LOCAL ENVIRONMENTAL AND COMMUNITY STANDARDS.

SUNVEST SOLAR LLC®
N27 W24025 PAUL CT. SUITE 100
PEWAUKEE, WI 53072
PHONE: (262)-547-1200
WWW.SUNVEST.COM

CIVIL ENGINEER STAMP:

ISSUANCE:
PRELIMINARY CIVIL PLANS

LICENSED ELECTRICAL ENGINEER certifies that they prepared all the electrical "E" sheets in this drawing set.
LICENSED STRUCTURAL ENGINEER certifies that they prepared all of the structural "S" sheets in this drawing set.
LICENSED CIVIL ENGINEER certifies that they prepared all of the civil "C" sheets in this drawing set.
It should be noted that any plan sheets not identified above have been prepared and certified by others and have been included herein for informational purposes only.

10		21	
9		20	
8		19	
7		18	
6		17	
5		16	
4		15	
3		14	
2		13	
1		12	
0	6/19/26	11	
REV	SET/DATE	REV	SET/DATE

DRAWN BY:	CHECKED BY:
SCALE: AS NOTED	JOB NO:

WATERTOWN HOPS

SHEET TITLE
GENERAL NOTES AND SYMBOLS

DWG. NO.
C-1.01

ESC LEGEND

- PROPERTY BOUNDARY
- SETBACKS
- ROW LINE
- EASEMENT LINE (SEE PLAN FOR TYPE)
- SETBACK LINE
- (E) CONTOUR (2-FOOT)
- (E) TREE LINE
- (E) FENCE LINE
- (E) OVERHEAD POWER LINE
- (P) LIMIT OF DISTURBANCE (LOD)
- (P) DEMO AREA

DEMO NOTES

1 (P) TREE CLEARING. CONTRACTOR SHALL CLEAR, REMOVE, AND DISPOSE OF ALL TREES, BRUSH, SAPLINGS, FALLEN TIMBER, STUMPS, AND VEGETATIVE DEBRIS WITHIN THE DESIGNATED WORK LIMITS SHOWN ON THE PROJECT PLANS. WORK INCLUDES CUTTING, GRUBBING, STUMP REMOVAL, ROOT RAKING, AND DISPOSAL OF ALL ORGANIC MATERIAL. ALL VEGETATION SHALL BE CUT FLUSH TO THE GROUND UNLESS OTHERWISE SPECIFIED. STUMPS AND MAJOR ROOTS SHALL BE REMOVED TO A MINIMUM DEPTH OF 6–12 INCHES BELOW FINISHED GRADE, OR AS REQUIRED TO ALLOW CONSTRUCTION ACTIVITIES SUCH AS GRADING, TRENCHING, AND PILE INSTALLATION.

ALL TREE CLEARING TO OCCUR BETWEEN NOVEMBER 1ST AND MARCH 31ST.

SUNVEST SOLAR LLC®

N27 W24025 PAUL CT. SUITE 100
PEWAUKEE, WI 53072
PHONE: (262)-547-1200
WWW.SUNVEST.COM

CIVIL ENGINEER STAMP:

ISSUANCE:
PRELIMINARY CIVIL PLANS

LICENSED ELECTRICAL ENGINEER certifies that they prepared all the electrical "E" sheets in this drawing set.
LICENSED STRUCTURAL ENGINEER certifies that they prepared all of the structural "S" sheets in this drawing set.
LICENSED CIVIL ENGINEER certifies that they prepared all of the civil "C" sheets in this drawing set.
It should be noted that any plan sheets not identified above have been prepared and certified by others and have been included herein for informational purposes only.

10		21	
9		20	
8		19	
7		18	
6		17	
5		16	
4		15	
3		14	
2		13	
1		12	
0	6/19/26	11	
REV	SET/DATE	REV	SET/DATE

DRAWN BY:	CHECKED BY:
SCALE: AS NOTED	JOB NO:

60' 0 60' 120'
1" = 60'

WATERTOWN HOPS

SHEET TITLE
EXISTING CONDITIONS & DEMO PLAN

DWG. NO.
C-2.00

ESC LEGEND

- PROPERTY BOUNDARY
- SETBACKS
- ROW LINE
- EASEMENT LINE (SEE PLAN FOR TYPE)
- SETBACK LINE
- (E) CONTOUR (1-FOOT)
- (E) TREE LINE
- (E) FENCE LINE
- (E) OVERHEAD POWER LINE
- (P) LIMIT OF DISTURBANCE (LOD)
- (P) SILT FENCE
- (P) COMPOST FILTER SOCK
- (P) SEEDING
- (P) CONSTRUCTION ENTRANCE
- (P) ROCK CHECK DAM
- (P) CONCRETE WASHOUT
- (P) STORM PIPE
- (P) FLARED END SECTION (FES)
- (P) RIP-RAP

ESC NOTES

1. (P) SILT FENCE (SEE DETAIL ON C-5.01)
2. (P) VEHICLE TRACKOUT CONTROL (SEE DETAIL ON C-5.01)
3. (P) LIMIT OF DISTURBANCE (LOD)
4. (P) COMPOST FILTER SOCK (TYP) (SEE DETAIL ON C-5.01)
5. (P) CONCRETE WASHOUT (SEE DETAIL ON C-5.01)
6. (P) STOCKPILE LOCATION (SEE DETAIL ON C-5.01)
7. (P) EROSION CONTROL BLANKET (SEE DETAIL ON C-5.01)

SUNVEST SOLAR LLC®
N27 W24025 PAUL CT. SUITE 100
PEWAUKEE, WI 53072
PHONE: (262)-547-1200
WWW.SUNVEST.COM

CIVIL ENGINEER STAMP:

ISSUANCE:
PRELIMINARY CIVIL PLANS

LICENSED ELECTRICAL ENGINEER certifies that they prepared all the electrical "E" sheets in this drawing set.
LICENSED STRUCTURAL ENGINEER certifies that they prepared all of the structural "S" sheets in this drawing set.
LICENSED CIVIL ENGINEER certifies that they prepared all of the civil "C" sheets in this drawing set.
It should be noted that any plan sheets not identified above have been prepared and certified by others and have been included herein for informational purposes only.

10		21	
9		20	
8		19	
7		18	
6		17	
5		16	
4		15	
3		14	
2		13	
1		12	
0	6/19/26	11	
REV	SET/DATE	REV	SET/DATE

DRAWN BY: | CHECKED BY:
SCALE: AS NOTED | JOB NO:

60' 0 60' 120'
1" = 60'

WATERTOWN HOPS

SHEET TITLE
EROSION CONTROL PLAN

DWG. NO.
C-3.00

CIVIL LEGEND

- PROPERTY BOUNDARY
- SETBACKS
- ROW LINE
- EASEMENT LINE (SEE PLAN FOR TYPE)
- SETBACK LINE
- (E) CONTOUR (1-FOOT)
- (E) FENCE LINE
- (E) OVERHEAD POWER LINE
- (P) FENCE
- (P) ACCESS ROAD
- (P) ACCESS GATE
- (P) EQUIPMENT PAD
- (P) STORM PIPE
- (P) FLARED END SECTION (FES)
- (P) TEMPORARY CONSTRUCTION LAYDOWN

CIVIL NOTES

1. (P) FENCE (SEE DETAIL ON C-5.00)
2. (P) ROAD (SEE DETAIL ON C-5.00)
3. (P) GATE (SEE DETAIL ON C-5.00)
4. (P) EQUIPMENT PAD (SEE STRUCTURAL DRAWINGS)
5. (P) CULVERT W/ FES (SEE DETAIL ON C-5.00)
6. (P) LAYDOWN YARD (SEE ROAD DETAIL ON C-5.00)

SUNVEST SOLAR LLC®
N27 W24025 PAUL CT. SUITE 100
PEWAUKEE, WI 53072
PHONE: (262)-547-1200
WWW.SUNVEST.COM

CIVIL ENGINEER STAMP:

ISSUANCE:
PRELIMINARY CIVIL PLANS

LICENSED ELECTRICAL ENGINEER certifies that they prepared all the electrical "E" sheets in this drawing set.
LICENSED STRUCTURAL ENGINEER certifies that they prepared all of the structural "S" sheets in this drawing set.
LICENSED CIVIL ENGINEER certifies that they prepared all of the civil "C" sheets in this drawing set.
It should be noted that any plan sheets not identified above have been prepared and certified by others and have been included herein for informational purposes only.

10		21	
9		20	
8		19	
7		18	
6		17	
5		16	
4		15	
3		14	
2		13	
1		12	
0	6/19/26	11	
REV	SET/DATE	REV	SET/DATE

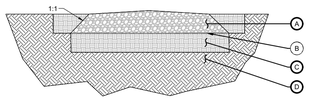
DRAWN BY:	CHECKED BY:
SCALE: AS NOTED	JOB NO:

60' 0 60' 120'
1" = 60'

WATERTOWN HOPS

SHEET TITLE
CIVIL SITE PLAN

DWG. NO.
C-4.00

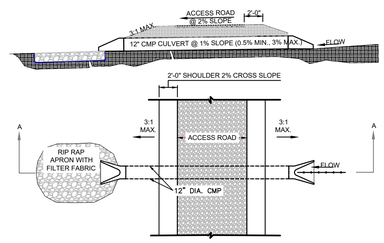


(A) 6" AGGREGATE SURFACE COURSE (CROWNED OR CROSS SLOPED 2%)
(B) GEOTEXTILE FABRIC
(C) 12" COMPACTED SUBGRADE TO MIN. 95%
(D) NATIVE SUBGRADE

GRAVEL ACCESS ROAD

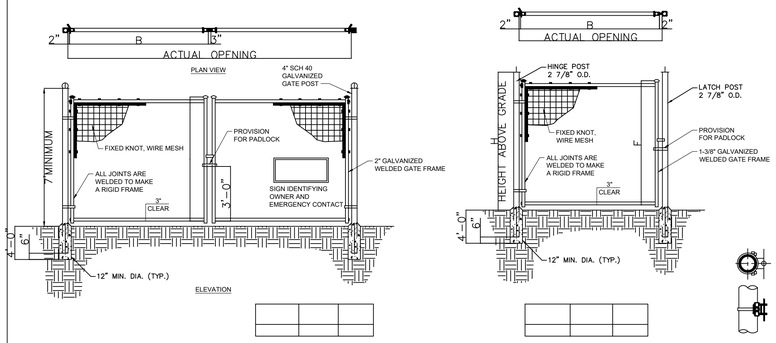
NOTES:
1. ACCESS ROAD IMPROVEMENTS SHALL COMPLY WITH ALL RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL REPORT, GEOTECHNICAL ENGINEER OF RECORD, AND ONSITE GEOTECHNICAL TESTING REPRESENTATIVE. CONTRACTOR SHALL IMMEDIATELY SUBMIT (WITHIN ONE (1) BUSINESS DAY) ALL DEVIATIONS TO CIVIL ENGINEER OF RECORD.
2. *SUBGRADE SOILS AND BASE MATERIALS SHOULD BE IN A STABLE, NON-PUMPING CONDITION AT THE TIME OF PLACEMENT AND COMPACTION.*
3. *AGGREGATE BASE SHOULD NOT BE PLACED WHEN THE SUBGRADE MATERIALS ARE WET OR FROZEN.*
4. *TOPSOIL SHOULD BE STRIPPED & STOCKPILED (6" MIN OR PER GEOTECHNICAL ENGINEER)*
5. *2% CROSS SLOPE OR CROWNED AS SPECIFIED BY CIVIL EOR.*

1 GRAVEL ROAD DETAIL
XX.XX



NOTES:
1. PIPE SHALL BE SIZED BY ENGINEER WITH CALCULATIONS INCLUDED IN PLANS, BUT SHALL BE MINIMUM 24-INCH DIAMETER.
2. HEADWALLS, ENDWALLS, OR FLARED END SECTIONS SHALL BE INSTALLED AT ENDS OF PIPE.
3. BACKFILL PIPE TRENCH TO 95% COMPACTION PER **AASHTO** METHOD T99.
4. 2 FOOT SHOULDERS AT MAXIMUM 2% CROSS SLOPE SHALL BE MAINTAINED.
5. MAXIMUM 3:1 SIDE SLOPES TO BE MAINTAINED BEYOND SHOULDERS.

2 CULVERT CROSSING
XX.XX



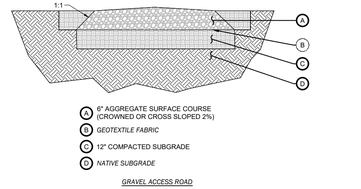
NOTES
1. ALL FENCING AND HARDWARE SHALL BE GALVANIZED.
2. CONCRETE ENCASEMENT AT END AND GATE POSTS ONLY
3. FIXED KNOT WIRE MESH TO BE BAKAERT SOLIDLOCK PRO (20/96/6), (17/96/6) OR EQUIVALENT

FIXED KNOT FARM FENCE - DOUBLE GATE
NOT TO SCALE

NOTES
1. ALL FENCING AND HARDWARE SHALL BE GALVANIZED.
2. CONCRETE ENCASEMENT AT END AND GATE POSTS ONLY
3. FIXED KNOT WIRE MESH TO BE BAKAERT SOLIDLOCK PRO (20/96/6), (17/96/6) OR EQUIVALENT

FIXED KNOT FARM FENCE - PERSONNEL GATE
NOT TO SCALE

3 GATE
XX.XX

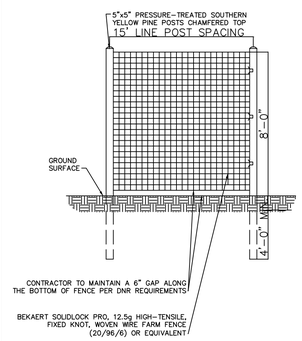


(A) 6" AGGREGATE SURFACE COURSE (CROWNED OR CROSS SLOPED 2%)
(B) GEOTEXTILE FABRIC
(C) 12" COMPACTED SUBGRADE
(D) NATIVE SUBGRADE

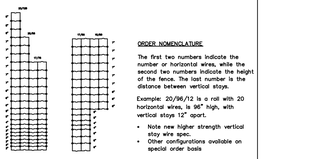
GRAVEL ACCESS ROAD

NOTES:
1. LAYDOWN YARD SHALL COMPLY WITH ALL RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL REPORT, GEOTECHNICAL ENGINEER OF RECORD, AND ONSITE GEOTECHNICAL TESTING REPRESENTATIVE. CONTRACTOR SHALL IMMEDIATELY SUBMIT (WITHIN ONE (1) BUSINESS DAY) ALL DEVIATIONS TO CIVIL ENGINEER OF RECORD.
2. *SUBGRADE SOILS AND BASE MATERIALS SHOULD BE IN A STABLE, NON-PUMPING CONDITION AT THE TIME OF PLACEMENT AND COMPACTION.*
3. *AGGREGATE BASE SHOULD NOT BE PLACED WHEN THE SUBGRADE MATERIALS ARE WET OR FROZEN.*
4. *TOPSOIL SHOULD BE STRIPPED & STOCKPILED (6" MIN OR PER GEOTECHNICAL ENGINEER)*
5. *2% CROSS SLOPE OR CROWNED AS SPECIFIED BY CIVIL EOR.*
6. *ALL TOPSOIL REMOVED FOR LAYDOWN YARD SHALL BE STOCKPILED AND RESPREAD AFTER CONSTRUCTION IS COMPLETE & GRAVEL AND GEOTEXTILE IS REMOVED.*

5 LAYDOWN YARD DETAIL
XX.XX



# WIRE	NOMENCLATURE	LENGTH	WEIGHT
23	23/120/6	330'	492
20	20/96/6	165'	305
~~20~~	~~20/96/8~~	~~330'~~	~~345~~
20	20/96/8	500'	508
~~17~~	~~17/96/8~~	~~330'~~	~~365~~
17	17/79/8	330'	326
10	10/80/8	330'	210
# WIRE	NOMENCLATURE	LENGTH	WEIGHT
23	23/120/12	330'	343
20	20/96/12	330'	282
20	20/96/12	660'	564
17	17/96/12	330'	248
17	17/96/12	660'	486
17	17/79/12	330'	235
10	10/80/12	660'	284



ORDER NOMENCLATURE

The first two numbers indicate the number or horizontal wires, while the second two numbers indicate the height of the fence. The last number is the distance between vertical stays.

Example: 20/96/12 is a roll with 20 horizontal wires, is 96" high, with vertical stays 12" apart.

- Note new higher strength vertical stay wire spec.
- Other configurations available on special order basis

WIRE	GAUGE	TENSILE STRENGTH	BREAKING LOAD	GALVANIZATION
Line Wires	12 1/2 ga.	Hi-Tensile 180K-212K	1347 lbs-1657 lbs	.85 oz.-1.4 oz. per sq. ft.
Stay Wires	12 1/2 ga.	Med-Tensile 140K-170K*	1048 lbs-1273 lbs*	.85 oz.-1.4 oz. per sq. ft.
Knot Wires	13 ga.	Low Tensile 57K-76K	311 lbs-456 lbs	.85 oz.-1.4 oz. per sq. ft.

FENCE NOTE:

1.. ALL CORNER, END POSTS, AND BRACE PANELS SHALL BE INSTALLED WITH 12" DIA X 42" CONCRETE FOOTERS..

4 SECURITY FENCE
XX.XX

NOT TO SCALE

SUNVEST SOLAR LLC®
N27 W24025 PAUL CT. SUITE 100
PEWAUKEE, WI 53072
PHONE: (262)-547-1200
WWW.SUNVEST.COM

CIVIL ENGINEER STAMP:

ISSUANCE:
PRELIMINARY CIVIL PLANS

LICENSED ELECTRICAL ENGINEER certifies that they prepared all the electrical "E" sheets in this drawing set.
LICENSED STRUCTURAL ENGINEER certifies that they prepared all of the structural "S" sheets in this drawing set.
LICENSED CIVIL ENGINEER certifies that they prepared all of the civil "C" sheets in this drawing set.
It should be noted that any plan sheets not identified above have been prepared and certified by others and have been included herein for informational purposes only.

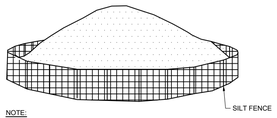
10		21	
9		20	
8		19	
7		18	
6		17	
5		16	
4		15	
3		14	
2		13	
1		12	
0	6/19/26	11	
REV	SET/DATE	REV	SET/DATE

DRAWN BY: CHECKED BY:
SCALE: AS NOTED JOB NO:

WATERTOWN HOPS

SHEET TITLE
CIVIL DETAILS

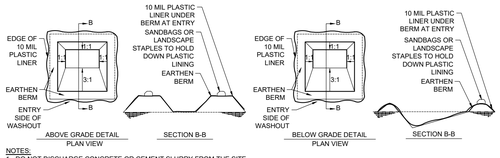
DWG. NO.
C-5.00



NOTE:

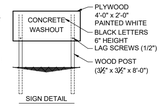
1. TO BE USED WHERE TOPSOIL OR GRANULAR MATERIAL IS STORED
2. MINIMUM 2:1 SIDE SLOPE OR LESS
3. UPON COMPLETION OF USE, STOCKPILE AREA SHALL BE SEEDED & SILT FENCE REMOVED ONCE STABILIZATION IS REACHED.

1 / XX.XX TOPSOIL & STOCKPILE MANAGEMENT

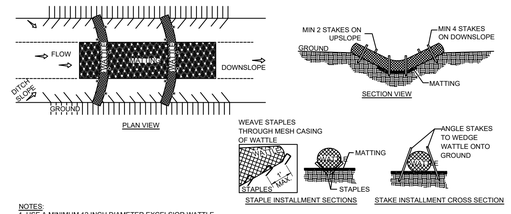


NOTES:
1. DO NOT DISCHARGE CONCRETE OR CEMENT SLURRY FROM THE SITE.
2. THE CONCRETE WASHOUT FACILITY SHOULD BE LOCATED A MINIMUM OF 50' FROM STORM DRAIN INLETS, BUFFERS, OR WATERCOURSES.
3. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE FACILITY.
4. THE ACTUAL LAYOUT CAN BE DETERMINED IN THE FIELD USING EITHER THE ABOVE GRADE OR BELOW GRADE CONSTRUCTION OPTION.
5. THE CONCRETE WASHOUT FACILITY SHOULD BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT SIZE AND QUANTITY TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY THE WASHOUT OPERATION.
6. THE PERIMETER OF THE 10 MIL LINER MUST BE HELD IN PLACE WITH SAND BAGS OR STEEL STAPLES.
7. ONCE CONCRETE WASTES ARE WASHED AND ALLOWED TO HARDEN THE CONCRETE SHOULD BE BROKEN UP, REMOVED AND DISPOSED OF AT AN APPROVED FACILITY IN ACCORDANCE WITH LOCAL AND STATE REGULATIONS. DISPOSE OF HARDENED CONCRETE ONCE THE WASHOUT FACILITY IS 75% FULL.
8. ONCE THE FACILITY IS NO LONGER NEEDED ALL MATERIALS SHALL BE REMOVED AND THE EXISTING GRADES SHALL BE RESTORED.
9. STORMWATER ACCUMULATED WITHIN THE WASHOUT MAY NOT BE DISCHARGED INTO THE STORM DRAIN SYSTEM OR RECEIVING SURFACE WATERS.

MAINTENANCE NOTES:
1. INSPECT CONCRETE WASHOUT DAILY TO DETECT LEAKS OR TEARS AND TO IDENTIFY WHEN MATERIALS NEED TO BE REMOVED AND REPLACED.



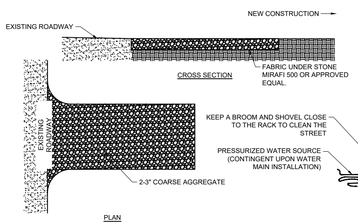
2 / XX.XX CONCRETE WASHOUT



NOTES:
1. USE A MINIMUM 12 INCH DIAMETER EXCELSIOR WATTLE.
2. USE 24 INCH LONG WOODEN STAKES WITH A 2"x2" NOMINAL CROSS SECTION.
4. INSTALL WATTLE(S) TO A HEIGHT ON SLOPE SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR SLOPES, OR AS DIRECTED.
5. INSTALL A MINIMUM OF TWO UPSLOPE STAKES AND FOUR DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO GROUND AT BOTTOM.
6. PROVIDE STAPLES MADE OF 0.125 INCH DIAMETER STEEL WIRE FORMED INTO A U-SHAPE NOT LESS THAN 12 INCHES IN LENGTH.
7. INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.
8. AFTER INSTALLATION OF STAPLES, CHINK ANY GAPS BETWEEN WATTLE AND GROUND WITH MATTING.

MAINTENANCE NOTES:
1. INSPECT WATTLES AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1 INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY.
2. ACCUMULATED SEDIMENT SHOULD BE CONTINUALLY MONITORED AND REMOVED WHEN IT REACHES 1/3 OF THE HEIGHT OF THE WATTLE.
3. LARGE DEBRIS, TRASH, AND LEAVES SHOULD BE REMOVED FROM IN FRONT OF THE WATTLE WHEN DISCOVERED.
4. IF EROSION CAUSES THE EDGES TO FALL TO A HEIGHT EQUAL TO OR LOWER THAN THE HEIGHT OF THE WATER, REPAIRS SHOULD BE MADE IMMEDIATELY TO PREVENT RUNOFF FROM BYPASSING THE WATTLE.
5. WATTLES SHOULD BE REMOVED AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN COMPLETELY STABILIZED. PERMANENT VEGETATION SHOULD REPLACE AREAS FROM WHICH WATTLES HAVE BEEN REMOVED.

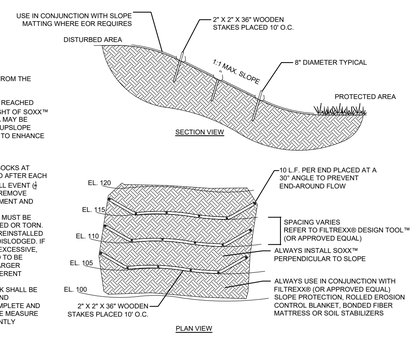
X / XX.XX FIBER ROLL IN DITCH



NOTES:
1. PUT SILT FENCE OR TREE PROTECTION FENCE UP TO ENSURE CONSTRUCTION ENTRANCE IS USED.
2. IF CONSTRUCTION ON THE SITES ARE SUCH THAT THE MUD IS NOT REMOVED BY THE VEHICLE TRAVELING OVER THE STONE, THEN THE TIRES OF THE VEHICLE MUST BE WASHED BEFORE ENTERING PUBLIC ROAD (ON AN AREA STABILIZED WITH CRUSHED STONE).
3. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO TO PUBLIC STREETS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

4 / XX.XX DRIVEWAY TRACKOUT CONTROL DETAIL

NOT TO SCALE

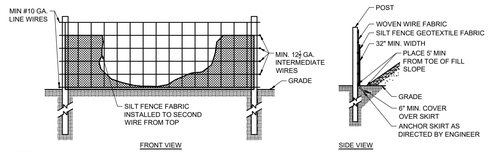


NOTES:
1. REMOVE SEDIMENT FROM THE UPSLOPE SIDE OF THE SOXX™ WHEN ACCUMULATION HAS REACHED ½ OF EFFECTIVE HEIGHT OF SOXX™
2. LOOSE FILTER MEDIA MAY BE BACKFILLED ON THE UPSLOPE SIDE OF THE SOXX™ TO ENHANCE PERFORMANCE

MAINTENANCE NOTES:
1. INSPECT COMPOST SOCKS AT LEAST BIWEEKLY AND AFTER EACH SIGNIFICANT RAINFALL EVENT (¼ INCH OR GREATER). REMOVE ACCUMULATED SEDIMENT AND ANY DEBRIS.
2. THE COMPOST SOCK MUST BE REPLACED IF CLOGGED OR TORN. THE SOCK MUST BE REINSTALLED IF UNDERMINED OR DISLODGED. IF PONDING BECOMES EXCESSIVE, THE SOCK MAY NEED TO BE REPLACED WITH A LARGER DIAMETER OR A DIFFERENT MEASURE.
3. THE COMPOST STOCK SHALL BE INSPECTED UNTIL LAND DISTURBANCE IS COMPLETE AND THE AREA ABOVE THE MEASURE HAS BEEN PERMANENTLY STABILIZED.

5 / XX.XX COMPOST SOCKS

NOT TO SCALE



NOTES:
1. USE SILT FENCE ONLY WHEN DRAINAGE AREA DOES NOT EXCEED 1/4 ACRE AND NEVER IN AREAS OF CONCENTRATED FLOW.
2. END OF SILT FENCE NEEDS TO BE TURNED UPHILL.
3. SILT FENCE SHOULD BE A MINIMUM OF 5 FEET FROM THE TOE OF SLOPE.
4. SYNTHETIC FILTER FABRIC SHOULD BE AT LEAST 95% BY WEIGHT POLYOLEFINS OR POLYESTER, WHICH IS CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO TO THE REQUIREMENTS IN ASTM D 6461.
5. SYNTHETIC FILTER FABRIC SHOULD CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USEABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0 TO 100 DEGREES F.
6. POSTS FOR SEDIMENT FENCES SHALL BE 1.33 LB/LF STEEL WITH A MIN LENGTH OF 5 FEET. STEEL POSTS SHALL HAVE PROTECTIONS TO FACILITATE FASTENING THE FABRIC.
7. USE WIRE FENCE WITH A MAX MESH SPACING OF 6 INCH FOR REINFORCEMENT OF STANDARD STRENGTH FILTER FABRIC.

MAINTENANCE NOTES:
1. INSPECT SEDIMENT FENCES AT LEAST BIWEEKLY AND AFTER EACH SIGNIFICANT RAINFALL EVENT (¼ INCH OR GREATER). MAKE REQUIRED REPAIRS IMMEDIATELY.
2. SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT IMMEDIATELY.
3. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAINFALL EVENT AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEAN OUT.
4. ONCE THE CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED, REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS. BRING THE SILT FENCE AREA TO GRADE AND APPLY PERMANENT STABILIZATION MEASURES.

6 / XX.XX STANDARD SILT FENCE

SUNVEST SOLAR LLC®
N27 W24025 PAUL CT. SUITE 100
PEWAUKEE, WI 53072
PHONE: (262)-547-1200
WWW.SUNVEST.COM

CIVIL ENGINEER STAMP:

ISSUANCE:
PRELIMINARY CIVIL PLANS

LICENSED ELECTRICAL ENGINEER certifies that they prepared all the electrical "E" sheets in this drawing set.
LICENSED STRUCTURAL ENGINEER certifies that they prepared all of the structural "S" sheets in this drawing set.
LICENSED CIVIL ENGINEER certifies that they prepared all of the civil "C" sheets in this drawing set.
It should be noted that any plan sheets not identified above have been prepared and certified by others and have been included herein for informational purposes only.

10		21	
9		20	
8		19	
7		18	
6		17	
5		16	
4		15	
3		14	
2		13	
1		12	
0	6/19/26	11	
REV	SET/DATE	REV	SET/DATE

DRAWN BY: | CHECKED BY:
SCALE: AS NOTED | JOB NO:

WATERTOWN HOPS

SHEET TITLE
EROSION CONTROL DETAILS

DWG. NO.
C-5.01

LANDSCAPE SCREENING INTENT & SELECTION

THE PROPOSED PLANS INCLUDE STRATEGICALLY PLACED VEGETATIVE LANDSCAPE BUFFERS DESIGNED TO REDUCE DIRECT VIEWS OF THE SOLAR ARRAY. WHERE COMMERCIALLY PRACTICABLE, THESE BUFFERS WILL UTILIZE REGIONALLY APPROPRIATE TREES AND SHRUBS THAT ARE WELL-ADAPTED TO THE LOCAL CLIMATE WHICH ALLOWS FOR BETTER ESTABLISHMENT AND HIGHER SURVIVAL RATES. THE BUFFER DESIGN INCORPORATES A MIX OF EVERGREEN TREES FOR YEAR-ROUND VISUAL SCREENING AND DECIDUOUS SHRUBS SELECTED FOR SEASONAL INTEREST--SUCH AS FOLIAGE COLOR, FLOWERING, AND FRUITING CHARACTERISTICS. SHRUBS WILL BE PLANTED IN SMALL GROUPINGS TO ENSURE THAT VARIOUS AESTHETIC FEATURES ARE VISIBLE THROUGHOUT THE YEAR. IN ADDITION TO VISUAL SCREENING, THE PLANTINGS OFFER ECOLOGICAL BENEFITS BY SUPPORTING POLLINATORS AND PROVIDING FORAGE, SHELTER, AND OVERWINTERING HABITAT FOR LOCAL WILDLIFE. AS THE PLANTINGS MATURE, THEY WILL FORM A DENSE, NATURAL HEDGE THAT ENHANCES BOTH FUNCTIONAL AND ENVIRONMENTAL PERFORMANCE.

SOLAR ORDINANCE - LANDSCAPE SCREENING REQUIREMENTS AND CALCULATIONS

CITY OF WATERTOWN, WI | § 550-96: LANDSCAPING REQUIREMENTS FOR REGULAR DEVELOPMENT

B. STREET FRONTAGES. THIS SUBSECTION REQUIRES THAT STREET FRONTAGES ON CERTAIN LOTS DEVELOPED AFTER THE EFFECTIVE DATE OF THIS CHAPTER CONTAIN A MINIMUM AMOUNT OF LANDSCAPING IN THOSE AREAS WHICH ABUT THE RIGHT-OF-WAY OF A PUBLIC STREET.

(1) ALL LANDSCAPING USED TO MEET THIS REQUIREMENT SHALL BE LOCATED WITHIN 10 FEET OF THE PUBLIC RIGHT-OF-WAY. IN NO INSTANCE SHALL SUCH LANDSCAPING BE LOCATION WITHIN A PUBLIC RIGHT-OF-WAY. LANDSCAPING SHALL NOT IMPEDE VEHICLE OR PEDESTRIAN VISIBILITY.
(2) FOR EVERY 100 FEET OF STREET FRONTAGE WHERE A DEVELOPED LOT ABUTS A PUBLIC STREET RIGHT-OF-WAY, 20 LANDSCAPING POINTS (AS DESCRIBED ON § 550-96) SHALL BE PROVIDED ON A PRORATED BASIS AND INSTALLED AND MAINTAINED PER THE REQUIREMENTS OF § 550-10.
(3) SHRUBS SHALL NOT BE USED TO MEET THIS REQUIREMENT. A MINIMUM NUMBER OF 50% OF ALL POINTS SHALL BE DEVOTED TO CLIMAX AND/OR TALL TREES, AND A MINIMUM OF 30% OF ALL POINTS SHALL BE DEVOTED TO MEDIUM TREES.

PLANT CATEGORY	LANDSCAPING POINTS/PLANT	MINIMUM PERMITTED INSTALLATION SIZE
TALL EVERGREEN TREE	40 PTS	5' TALL
MEDIUM EVERGREEN TREE	20 PTS	4' TALL
TALL DECIDUOUS SHRUBS	5 PTS	3' TALL
MEDIUM DECIDUOUS SHRUB	3 PTS	2' TALL

LANDSCAPING POINTS CALCULATION	
LINEAR FEET OF STREET FRONTAGE	**600 FT**
REQUIRED LANDSCAPING POINTS	**120 PTS**
LANDSCAPING POINTS FROM TREES	**960 PTS**
TALL EVERGREEN TREES - 16	**640 PTS**
MEDIUM EVERGREEN TREES - 16	**320 PTS**
SUPPLEMENTAL LANDSCAPING POINTS FROM SHRUBS	**133 PTS**
TALL DECIDUOUS SHRUBS - 20	**100 PTS**
MEDIUM DECIDUOUS SHRUBS - 11	**33 PTS**
TOTAL LANDSCAPING POINTS	**1,093 PTS**

REQUIREMENT MEET BY PROPOSED LANDSCAPE SCREENING

C. PAVED AREAS. THIS SECTION REQUIRES THAT PAVED AREAS ON CERTAIN LOTS DEVELOPED AFTER THE EFFECTIVE DATE OF THIS CHAPTER CONTAIN A MINIMUM AMOUNT OF LANDSCAPING WITHIN, OR WITHIN 10 FEET OF, THE PAVED AREA.

(1) MINIMUM OF 360 FEET OF LANDSCAPED AREA, WHICH SHALL BE LOCATED WITHIN 10 FEET OF PAVED AREA, IS REQUIRED FOR THE PLACEMENT OF EVERY 100 LANDSCAPING POINTS. SAID AREA DOES NOT HAVE TO BE PROVIDED IN ONE CONTIGUOUS AREA. PLANTS USED TO FULFILL THIS REQUIREMENT SHALL VISUALLY SCREEN PARKING, LOADING AND CIRCULATION AREAS FROM VIEW FROM PUBLIC STREETS.
(2) FOR EVERY 20 OFF-STREET PARKING STALLS OR 10,000 SQUARE FEET OF PAVEMENT LOCATED IN A DEVELOPMENT, 40 LANDSCAPING POINTS (AS DESCRIBED IN § 550-95) SHALL BE PROVIDED ON A PRORATED BASIS AND INSTALLED AND MAINTAINED PER THE REQUIREMENTS OF § 550-101. A MINIMUM OF 30% OF ALL POINTS SHALL BE DEVOTED TO CLIMAX AND/OR TALL TREES AND A MINIMUM OF 40% OF ALL POINTS SHALL BE DEVOTED TO SHRUBS.

PLANT CATEGORY	LANDSCAPING POINTS/PLANT	MINIMUM PERMITTED INSTALLATION SIZE
TALL EVERGREEN TREE	40 PTS	5' TALL
LOW EVERGREEN TREE	12 PTS	3' TALL
TALL DECIDUOUS SHRUB	5 PTS	3' TALL
MEDIUM DECIDUOUS SHRUB	3 PTS	2' TALL

LANDSCAPING POINTS CALCULATION	
PAVED AREA	**4,754 SQ FT**
REQUIRED LANDSCAPING POINTS	**20 PTS**
TOTAL LANDSCAPING POINTS (WITHIN 10' OF PAVEMENT)	**103 PTS**
TALL EVERGREEN TREES - 1	**40 PTS**
LOW EVERGREEN TREES - 2	**24 PTS**
TALL DECIDUOUS SHRUBS - 6	**30 PTS**
MEDIUM DECIDUOUS SHRUBS - 3	**9 PTS**
LANDSCAPE PROVIDED WITHIN 10 FT OF PAVEMENT	**538 SQ FT**
LANDSCAPE PROVIDED PER 100 LANDSCAPING POINTS	**522 SQ FT**

REQUIREMENT MEET BY PROPOSED LANDSCAPE SCREENING

PROPOSED LANDSCAPE SCREENING PLANT SPECIES LIST

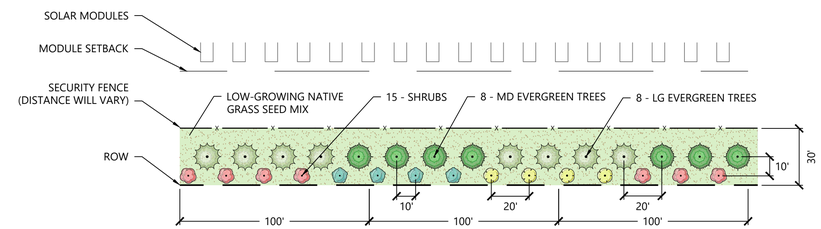
COMMON / BOTANICAL NAME	SIZE	SPACING O.C.	MATURE SIZE
TALL EVERGREEN TREES			
WHITE FIR / ABIES CONCOLOR	6' HT. B&B	20' O.C.	H 40'-65' W 15'-25'
MEDIUM EVERGREEN TREES			
BLACK HILLS SPRUCE / PICEA GLAUCA DENSATA	6' HT. B&B	20' O.C.	H 25'-40' W 15'-25'
LOW EVERGREEN TREES			
TECHNY ARBORVITAE / THUJA OCCIDENTALIS 'TECHNY'	6' HT. B& B	32' O.C.	H 10'-15' W 6'-10'

COMMON / BOTANICAL NAME	SIZE	SPACING O.C.	MATURE SIZE
TALL DECIDUOUS SHRUBS			
GRAY DOGWOOD / CORNUS RACEMOSA	#5 CONT.	10' O.C.	H 10'-15' W 10'-15'
NANNYBERRY / VIBURNUM LENTAGO	#5 CONT.	10' O.C.	H 10'-15' W 6'-10'
MEDIUM DECIDUOUS SHRUBS			
AMERICAN HAZELNUT / CORYLUS AMERICANA	#5 CONT.	10' O.C.	H 10-15' W 10'-15'

NOTES:
1. QUANTITIES ON PLAN SUPERSEDE LIST QUANTITIES IN THE EVENT OF A DISCREPANCY.
2. B.B. SPECIFIES ROOT TYPE AS BALLED AND BURLAPPED.
3. H.T. SPECIFIES MINIMUM SPECIMEN HEIGHT UPON INSTALLATION.
4. #5 CONT. TO MEET MINIMUM SIZE REQUIREMENT OF 24"H OR 30"W FOR DECIDUOUS SHRUBS UPON INSTALLATION. IF PLANT SIZE UNAVAILABLE AT #5 CONT. UPSIZE CONTAINER UNTIL MINIMUM PLANT SIZE REQUIREMENT IS MET.
5. PLANT SPECIES SUBJECT TO CHANGE BASED UPON AVAILABILITY AT TIME OF PLANTING.

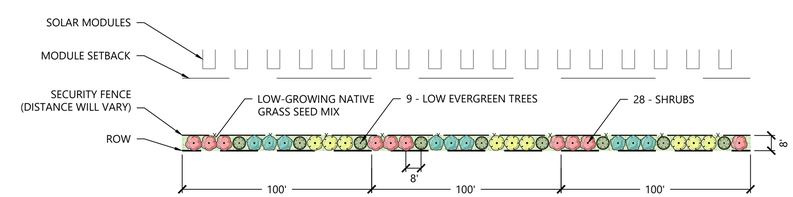
TYPE 1 - PROPOSED STREET FRONTAGE LANDSCAPE SCREENING DETAIL

SCALE 1" = 40'



TYPE 2 - PROPOSED ENTRY ROAD LANDSCAPE SCREENING DETAIL

SCALE 1" = 40'



LANDSCAPE SCREENING PLANT MATERIAL

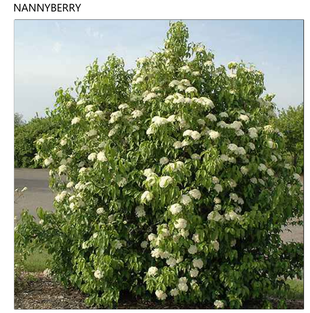
WHITE FIR

BLACK HILLS SPRUCE

TECHNY ARBORVITAE

GRAY DOGWOOD

NANNYBERRY



AMERICAN HAZELNUT

Westwood
Phone (952) 937-5150
Toll Free (888) 937-5150
12701 Whitewater Drive, Suite #300
Minnetonka MN, 55343
westwoodps.com
Westwood Professional Services, Inc.

PREPARED FOR:

SUNVEST SOLAR LLC®
330 W. State Street Suite 1
Geneva, IL 60134

REVISIONS:

#	DATE	COMMENT	BY	CHK	APR
A	06/17/2026	ISSUED FOR REVIEW	ELM	RER	NTM

Watertown Hops Solar

Jefferson County, Wisconsin

Preliminary Landscape Screening Notes & Details

NOT FOR CONSTRUCTION

DATE: 06/17/2026

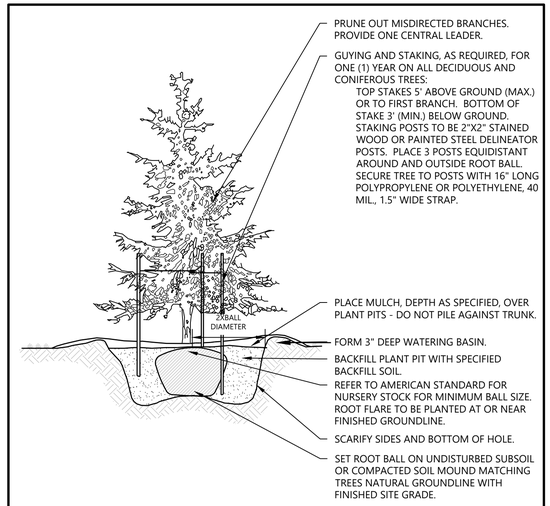
SHEET: L100

REV: A

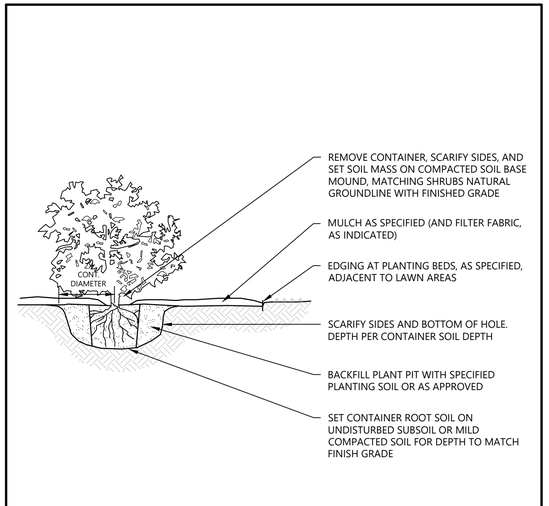
PLANTING NOTES

1. CONTRACTOR SHALL CONTACT WISCONSIN DIG SAFE SYSTEM (811) TO VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY PLANTS OR LANDSCAPE MATERIAL.
2. ACTUAL LOCATION OF PLANT MATERIAL IS SUBJECT TO FIELD AND SITE CONDITIONS AS WELL AS DO NOT INTERFERE WITH INSTALLED FACILITY COMPONENTS (DRAINTILE, UNDERGROUND WIRING, FENCING).
3. NO PLANTING WILL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
4. ALL SUBSTITUTIONS MUST BE APPROVED BY THE OWNER PRIOR TO SUBMISSION OF ANY BID AND/OR QUOTE BY THE LANDSCAPE CONTRACTOR.
5. CONTRACTOR SHALL PROVIDE ONE YEAR GUARANTEE OF ALL PLANT MATERIALS. THE GUARANTEE BEGINS ON THE DATE OF THE OWNER'S WRITTEN ACCEPTANCE OF THE INITIAL PLANTING. REPLACEMENT PLANT MATERIAL SHALL HAVE A ONE YEAR GUARANTEE COMMENCING UPON PLANTING.
6. ALL PLANTS TO BE SPECIMEN GRADE, WISCONSIN-GROWN AND/OR HARDY. SPECIMEN GRADE SHALL ADHERE TO, BUT IS NOT LIMITED BY, THE FOLLOWING STANDARDS:
   ALL PLANTS SHALL BE FREE FROM DISEASE, PESTS, WOUNDS, SCARS, ETC.
   ALL PLANTS SHALL BE FREE FROM NOTICEABLE GAPS, HOLES, OR DEFORMITIES.
   ALL PLANTS SHALL BE FREE FROM BROKEN OR DEAD BRANCHES.
   ALL PLANTS SHALL HAVE HEAVY, HEALTHY BRANCHING AND LEAFING.
   CONIFEROUS TREES SHALL HAVE AN ESTABLISHED MAIN LEADER AND A HEIGHT TO WIDTH RATIO OF NO LESS THAN 5:3.
7. PLANTS TO MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2004 OR MOST CURRENT VERSION) REQUIREMENTS FOR SIZE AND TYPE SPECIFIED.
8. PLANTS TO BE INSTALLED AS PER WILNA & ANSI STANDARD PLANTING PRACTICES.
9. PLANTS SHALL BE IMMEDIATELY PLANTED UPON ARRIVAL AT SITE. PROPERLY HEEL-IN MATERIALS IF NECESSARY; TEMPORARY ONLY.
10. PRIOR TO PLANTING, FIELD VERIFY THAT THE ROOT COLLAR/ROOT FLAIR IS LOCATED AT THE TOP OF THE BALLED & BURLAP TREE. IF THIS IS NOT THE CASE, SOIL SHALL BE REMOVED DOWN TO THE ROOT COLLAR/ROOT FLAIR. WHEN THE BALLED & BURLAP TREE IS PLANTED, THE ROOT COLLAR/ROOT FLAIR SHALL BE EVEN OR SLIGHTLY ABOVE FINISHED GRADE.
11. REMOVE POT ON POTTED PLANTS; SPLIT AND BREAK APART PEAT POTS.
12. PRUNE PLANTS AS NECESSARY - PER STANDARD NURSERY PRACTICE AND TO CORRECT POOR BRANCHING OF EXISTING AND PROPOSED TREES.
13. THE NEED FOR SOIL AMENDMENTS SHALL BE DETERMINED UPON SITE SOIL CONDITIONS PRIOR TO PLANTING. LANDSCAPE CONTRACTOR SHALL NOTIFY OWNER FOR THE NEED OF ANY SOIL AMENDMENTS.
14. BACKFILL SOIL AND TOPSOIL TO BE EXISTING TOP SOIL FROM SITE FREE OF ROOTS, ROCKS LARGER THAN ONE INCH, SUBSOIL DEBRIS, AND LARGE WEEDS UNLESS SPECIFIED OTHERWISE. MINIMUM 12" DEPTH TOPSOIL FOR TREE, SHRUBS, AND PERENNIALS.
15. PROVIDE MULCH FOR ALL TREE AND SHRUB PLANTINGS PER DETAIL. MULCH TO BE SHREDDED HARDWOOD AND FREE OF DELETERIOUS MATERIAL. MULCH 3' DIAMETER RING AROUND ALL TREES AND SHRUBS TO A DEPTH OF 4". KEEP MULCH OFF TRUNK.
16. CONTRACTOR SHALL PROVIDE NECESSARY WATERING OF PLANT MATERIALS UNTIL THE PLANT IS FULLY ESTABLISHED OR IRRIGATION SYSTEM IS OPERATIONAL. OWNER WILL NOT PROVIDE WATER FOR CONTRACTOR.
17. REPAIR, REPLACE, OR PROVIDE SOD/SEED AS REQUIRED FOR ANY ROADWAY BOULEVARD AREAS ADJACENT TO THE SITE DISTURBED DURING CONSTRUCTION.
18. REPAIR ALL DAMAGE TO SOILS AND VEGETATION FROM PLANTING OPERATIONS AT NO COST TO OWNER.

PLANTING DETAILS



Westwood | EVERGREEN TREE PLANTING (NOT TO SCALE) | LA01



Westwood | SHRUB & PERENNIAL CONTAINER PLANTING (NOT TO SCALE) | LA03

NATIVE POLLINATOR SEED MIX

SEEDING RATE - 13.5 LB/ACRE - 86.1 SEEDS/SQ FT

Common Name	Scientific Name	Bloom Month	PLS Lbs/Acre	% of Mix by Weight	Seeds/ft^2	% of Mix by Seeds/ft^2
Sideoats Grama	Bouteloua curtipendula		4.26	31.53%	9.40	10.92%
Slender Wheatgrass	Elymus trachycaulus		1.24	9.18%	3.10	3.60%
Plains Oval Sedge	Carex brevior		0.35	2.59%	3.70	4.30%
Wood Gray Sedge	Carex grisea		0.12	0.86%	0.40	0.46%
Troublesome Sedge	Carex molesta		0.16	1.18%	1.50	1.74%
Brown Fox Sedge	Carex vulpinoidea		0.24	1.80%	8.90	10.34%
Virginia Wild Rye	Elymus virginicus		0.22	1.65%	0.30	0.35%
Little Bluestem	Schizachyrium scoparium		3.39	25.10%	18.70	21.72%
Prairie Dropseed	Sporobolus heterolepis		0.05	0.39%	0.30	0.35%
Graminoid Total			**10.03**	**74.28%**	**46.30**	**53.77%**
Common Yarrow	Achillea millefolium	Jul-Sep	0.09	0.63%	5.60	6.50%
Nodding Onion	Allium cernuum	Jun-Aug	0.03	0.24%	0.10	0.12%
Lead Plant	Amorpha canescens	Jun-Aug	0.18	1.33%	1.10	1.28%
Canada Anemone	Anemone canadensis	May-Jul	0.01	0.04%	0.00	0.00%
Wild Columbine	Aquilegia canadensis	Apr-Jun	0.01	0.04%	0.10	0.12%
Whorled Milkweed	Asclepias verticillata	Jul-Sep	0.01	0.05%	0.00	0.00%
Common Milkweed	Asclepias syriaca	Jun-Aug	0.04	0.31%	0.10	0.12%
Butterfly Milkweed	Asclepias tuberosa	Jun-Aug	0.04	0.31%	0.10	0.12%
Partridge Pea	Chamaecrista fasciculata	Jun-Sep	0.61	4.55%	0.60	0.70%
White Prairie Clover	Dalea candida	Jun-Sep	0.67	4.98%	4.70	5.46%
Purple Prairie Clover	Dalea purpurea	Jun-Aug	0.79	5.88%	5.20	6.04%
Cream Gentian	Gentiana flavida	Aug-Oct	0.04	0.26%	1.80	2.09%
Virginia Mountain Mint	Pycnanthemum virginianum	Jul-Sep	0.02	0.16%	1.70	1.97%
Prairie Wild Rose	Rosa arkansana	Jun-Aug	0.04	0.31%	0.00	0.00%
Black-eyed Susan	Rudbeckia hirta	Jun-Oct	0.25	1.88%	8.60	9.99%
Gray Goldenrod	Solidago nemoralis	Aug-Oct	0.05	0.37%	5.50	6.39%
Calico Aster	Symphyotrichum lateriflorum	Aug-Oct	0.01	0.04%	0.50	0.58%
Sky Blue Aster	Symphyotrichum oolentangiense	Aug-Oct	0.02	0.16%	0.60	0.70%
Ohio Spiderwort	Tradescantia ohiensis	Jun-Aug	0.03	0.24%	0.10	0.12%
Hoary Vervain	Verbena stricta	Jun-Sep	0.19	1.41%	2.00	2.32%
Golden Alexanders	Zizia aurea	May-Jul	0.34	2.53%	1.40	1.63%
Forb Total			**3.47**	**25.72%**	**39.80**	**46.23%**
Mix Total			**13.50**	**100.00%**	**86.10**	**100.00%**

TOTAL SEEDING ACREAGE

NATIVE POLLINATOR SEED MIX	10.3 AC

Westwood
Phone (952) 937-5150
Toll Free (888) 937-5150
12701 Whitewater Drive, Suite #300
Minnetonka MN, 55343
westwoodps.com
Westwood Professional Services, Inc.

PREPARED FOR:

SUNVEST SOLAR LLC®
330 W. State Street Suite 1
Geneva, IL 60134

REVISIONS:

#	DATE	COMMENT	BY	CHK	APR
A	06/17/2026	ISSUED FOR REVIEW	ELM	RER	NTM

Watertown Hops Solar

Jefferson County, Wisconsin

Preliminary Landscape Screening Notes & Details

NOT FOR CONSTRUCTION

DATE: 06/17/2026

SHEET: L101

REV: A

N:\0091956.00_CAD_Civil\0091956.00-R_-01.dwg 6/17/2026 5:16 PM Elsa Machado

LEGEND:

- PROPERTY BOUNDARY
- PROPOSED BUILDING SETBACK LINE
- PARCEL LINES
- RIGHT-OF-WAY LINES
- EASEMENT LINES
- 900 — EX. 5' INDEX CONTOUR
- EX. 1' INTERVAL CONTOUR
- POH — EX. OVERHEAD POWER
- EX. TREE LINE
- X — EX. FENCE
- X — PROPOSED FENCE
- PROPOSED MODULE SETBACK
- PROPOSED SOLAR ARRAY
- PROPOSED ELECTRICAL EQUIPMENT
- PROPOSED INVERTER
- PROPOSED ACCESS ROAD
- X — PROPOSED SECURITY FENCE
- UMV — PROPOSED UNDERGROUND COLLECTION
- P-POH — PROPOSED OVERHEAD COLLECTION
- PROPOSED LANDSCAPE SCREENING (TYPE 1)
- PROPOSED LANDSCAPE SCREENING (TYPE 2)
- PROPOSED AREA FOR SEED MIX REVEGETATION

Westwood

Phone (952) 937-5150
Toll Free (888) 937-5150
12701 Whitewater Drive, Suite #300
Minnetonka MN, 55343
westwoodps.com

Westwood Professional Services, Inc.

PREPARED FOR:

SUNVEST SOLAR LLC®
330 W. State Street Suite 1
Geneva, IL 60134

REVISIONS:

#	DATE	COMMENT	BY	CHK	APR
A	06/17/2026	ISSUED FOR REVIEW	ELM	RER	NTM

N

0' #### #### ####

Watertown Hops Solar

Jefferson County, Wisconsin

Preliminary Landscape Screening Plan

NOT FOR CONSTRUCTION

DATE: 06/17/2026

SHEET: L102

REV: A

N:\00081356.00\ CADD\ Civil\00081356.00-R-01.dwg 6/17/2026 5:16 PM Elia Michelle

WATERTOWN HOPS
1224 AMERICAN WAY, WATERTOWN, WI 53094
(43.176897, -88.761446)

PV SYSTEM DETAILS

ARRAY TYPE:	FIXED TILT
DC SYSTEM SIZE:	2.58542 MW DC
DC SYSTEM VOLTAGE:	1000 V
AC SYSTEM SIZE:	2.25 MVA @PF=1
MODULES	(3,554) TRINA TSM-DE15H(II) 400W (1,956) HELIENE 144HC M10 NTYP SL BIFACIAL 595W
INVERTERS:	SOLAREDGE, (22) SE100KUS, (1) SE40KUS, (1) SE10KUS
OPTIMIZERS:	(1,777) SOLAREDGE, P960, 2:1 (1,956) SOLAREDGE, C651U, 1:1
RACKING:	DCE
CLAMPS:	N/A
AZIMUTH:	180°
ARRAY PITCH:	25°
ARRAY TILT TRINA:	27'-8" CENTER SPACING (TRINA 400W)
ARRAY TILT HELIENE:	31'-2" CENTER SPACING (HELIENE 595W)
DC/AC RATIO:	1.149

INSPECTION ITEMS

CONTRACTOR SHALL STRICTLY ADHERE TO THE FOLLOWING CODE STANDARDS UNCLES OTHERWISE NOTED WITHIN THE DRAWING; NEC. 2017, IBC. 2015, IFC. 2015 AND APPLICABLE LOCAL CODES.

PROGRESS INSPECTIONS:

ROUGH ELECTRIC:	☐ REQUIRED	☐ NOT REQUIRED
ROUGH BUILDING:	☐ REQUIRED	☐ NOT REQUIRED

FINAL INSPECTIONS:

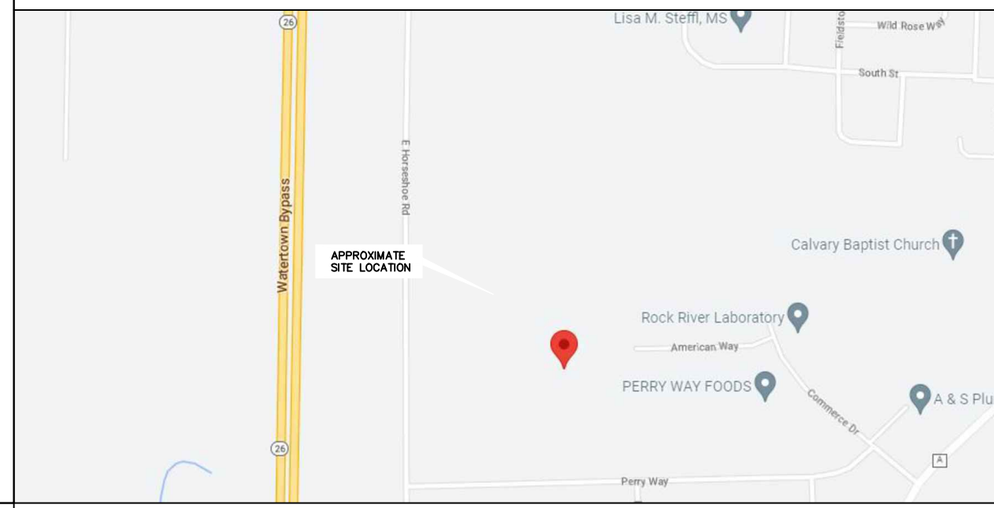
ELECTRIC:	☐ REQUIRED	☐ NOT REQUIRED
BUILDING:	☐ REQUIRED	☐ NOT REQUIRED
OTHER:	☐ REQUIRED	☐ NOT REQUIRED

CONTRACTOR SHALL BE KNOWLEDGEABLE OF ANY LOCAL AHJ INSPECTIONS REQUIRED NOT LISTED.

SUNVEST
Developing • Renewable • Relationships
(262) 547-1200 www.sunvest.com
N27 W24025 PAUL CT. SUITE 100
PEWAUKEE, WI 53072
PHONE: (262)-547-1200
WWW.SUNVEST.COM

Section 3, Item A.

LOCATION MAP



NOTES

1. THE APPLICANT PROPOSES TO INSTALL PV MODULES AND WEATHER PROOF EQUIPMENT FOR AN UNMANNED FACILITY.
2. EQUIPMENT IS UNMANNED AND NOT FOR HUMAN HABITATION, HANDICAP ACCESS IS THEREFORE NOT REQUIRED.
3. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. NON-CONFORMING CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
4. INCORRECTLY FABRICATED, DAMAGED OR OTHERWISE MISFITTING OR NON-CONFORMING MATERIALS OR CONDITIONS SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER AND DEVELOPER FOR REMEDIAL OR CORRECTIVE ACTION.
5. DEVELOPMENT AND USE OF THE SITE WILL CONFORM TO ALL APPLICABLE CODES AND ORDINANCES.

DISCLAIMER

IT IS A VIOLATION OF THE LAW FOR ANY PERSON UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER TO ALTER THIS DOCUMENT. UNLESS EXPLICITLY AGREED TO BY THE ENGINEER IN WRITING, THE ENGINEER DISCLAIMS ALL LIABILITY ASSOCIATED WITH THE REUSE, ALTERATION OR MODIFICATION OF THE CONTENTS HEREIN.

PROFESSIONAL ENGINEER STAMPS

ISSUANCE:

10% PRELIMINARY PLAN SET

LICENSED ELECTRICAL ENGINEER certifies that they prepared all the electrical "E" sheets in this drawing set.
LICENSED STRUCTURAL ENGINEER certifies that they prepared all of the structural "S" sheets in this drawing set.
LICENSED CIVIL ENGINEER certifies that they prepared all of the civil "C" sheets in this drawing set.
It should be noted that any plan sheets not identified above have been prepared and certified by others and have been included herein for informational purposes only.

SITE INFORMATION

PROPERTY OWNER: WATERTOWN HOPS

POWER COMPANY: WE ENERGIES

PROJECT MANAGER: TBD PHONE:

FENCE LINEAR FEET: 3,855' LF

APPROXIMATE SITE ACREAGE: 10.27 ACRES

GEOLOCATION COORDINATES: TBD COORDINATE SYSTEM: TBD

AERIAL MAP

DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE DEVELOPER OR ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

DRAWING INDEX

DWG NO:	SHEET TITLE
T-1.00	TITLE SHEET
G-1.00	GENERAL NOTES AND SYMBOLS
G-2.00	GENERAL NOTES
PV-1.00	ARRAY LAYOUT
E-1.00	ONE-LINE DIAGRAM
E-4.00	SPEC SHEETS
E-4.01	SPEC SHEETS

10		21	
9		20	
8		19	
7		18	
6	05/06/26	17	
5	03/31/26	16	
4	06/17/24	15	
3	05/22/24	14	
2	05/21/24	13	
1	03/07/24	12	
0	04/12/23	11	
REV	SET/DATE	REV	SET/DATE

DRAWN BY: TG CHECKED BY: BN

SCALE: AS NOTED JOB NO: 01953

WATERTOWN HOPS

1224 AMERICAN WAY
WATERTOWN, WI 53094

SHEET TITLE

TITLE SHEET

DWG. NO.

T-1.00

21

SYMBOL LEGEND:

- FUSE
- SURGE PROTECTION DEVICE/ SURGE ARRESTER MOV STYLE
- CIRCUIT BREAKER
- GROUND
- GROUNDED WYE
- DELTA
- MV DISCONNECT
- POTENTIAL TRANSFORMER (PT)
- CPT — CONTROL POWER TRANSFORMER
- CT — CURRENT TRANSFORMER (CT)
- CS — CURRENT SENSOR (CS)
- VS — VOLTAGE SENSOR (VS)
- METER — METER
- INVERTER
- INVERTER WITH INTEGRATED DISCONNECT
- PANELBOARD
- MAIN DISTRIBUTION SWITCHBOARD
- FUSED DISCONNECT
- NON FUSED DISCONNECT
- TRANSFORMER
- TRANSFORMER W/ INTERNAL FUSING AND SURGE ARRESTERS
- 25A, XXXA 100%, 25A, SPD TYP. — STRING COMBINER BOX
- R — RESISTOR
- R — RECLOSER W/ VACCUM INTERRUPTER
- R, 50/51, 50/51N, 27,59,81 — CUSTOMER RECLOSER W/ MULTIFUNTIONAL RELAY
- TRACKER MOTOR
- 1 — PV MODULE
- L — INDICATING LIGHT
- SPECIAL PURPOSE OUTLET CONNECTION
- ST — SHUNT-TRIP
- XXXA FUSE, XXXA/3P 100% BPS, GFP — FUSED BOLTED-PRESSURE SWITCH (BPS) W/ GROUND-FAULT-PROTECTION (GFP)
- DC/DC OPTIMIZER
- LV CONNECTION/TERMINATION
- MV LIVE-FRONT BUSHING/TERMINATION
- MV DEAD-FRONT BUSHING/ TERMINATION
- MEDIUM VOLTAGE- UNDERGROUND
- OHE — EXISTING OVERHEAD CONDUCTORS
- DC — DC CONDUCTORS- ABOVE GROUND
- AC — AC CONDUCTORS ABOVE GROUND
- DC CONDUCTORS- UNDERGROUND
- AC CONDUCTORS- UNDERGROUND
- COMMUNICATION

GENERAL NOTES:

1. GENERAL REQUIREMENTS:

1.1 THE WORK TO BE DONE UNDER THIS PROJECT INCLUDES PROVIDING ALL EQUIPMENT, MATERIALS, LABOR AND SERVICES NOT INCLUDED IN THE B.O.M, AND PERFORMING ALL OPERATIONS FOR COMPLETE AND OPERATING SYSTEMS. ANY WORK NOT SPECIFICALLY COVERED BUT NECESSARY TO COMPLETE THIS INSTALLATION, SHALL BE PROVIDED. ALL EQUIPMENT AND WIRING TO BE NEW AND PROVIDED UNDER THIS CONTRACT UNLESS OTHERWISE NOTED.

1.2 ENTIRE INSTALLATION, INCLUDING MATERIALS, EQUIPMENT AND WORKMANSHIP, SHALL CONFORM TO THE CURRENT EDITION OF THE NATIONAL ELECTRIC CODE (NEC) AS WELL AS ALL APPLICABLE LAWS AND REGULATIONS AND REGULATORY BODIES HAVING JURISDICTION OVER THIS WORK:

1.3 THE TERM "FURNISH" SHALL MEAN TO OBTAIN AND SUPPLY TO THE JOB SITE. THE TERM "INSTALL" SHALL MEAN TO FIX IN POSITION AND CONNECT FOR USE. THE TERM "PROVIDE" SHALL MEAN TO FURNISH AND INSTALL. THE TERM "CONTRACTOR" SHALL MEAN ELECTRICAL CONTRACTOR.

1.4 ONLY WRITTEN CHANGES AND/OR MODIFICATIONS APPROVED BY THE ENGINEER, CONSULTING ENGINEER OR OWNER'S REPRESENTATIVE WILL BE RECOGNIZED.

1.5 THE ELECTRICAL CONTRACTOR SHALL SUBMIT, FOR THE ENGINEER'S APPROVAL, DETAILED SHOP DRAWINGS OF ALL EQUIPMENT SPECIFIED.

1.6 CONTRACTOR SHALL COORDINATE WITH SPECIFICATIONS PROVIDED BY OTHER TRADES.

1.7 PROVIDE OPERATING AND MAINTENANCE MANUALS, PER SPECIFICATIONS, AND GIVE INSTRUCTIONS TO USER FOR ALL EQUIPMENT AND SYSTEMS PROVIDED UNDER THIS CONTRACT AFTER ALL ARE CLEANED AND OPERATING.

1.8 KEEP PREMISES FREE FROM RUBBISH. REMOVE ALL ELECTRICAL RUBBISH FROM SITE.

1.9 ALL WORK SHALL BE INSTALLED CONCEALED UNLESS OTHERWISE NOTED.

1.10 THE WORK SHALL INCLUDE ALL PANELS, DEVICES, FEEDERS AND BRANCH CIRCUIT WIRING AS REQUIRED FOR THE DISTRIBUTION SYSTEM INDICATED AND CALLED FOR ON THE DRAWINGS, REQUIRED BY SPECIFICATIONS AND AS NECESSARY FOR COMPLETE FUNCTIONAL SYSTEMS PRESENTED AND INTENDED.

1.11 THE CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR, TOOLS, EQUIPMENT, CONSUMABLES AND SERVICES REQUIRED FOR OBTAINING, DELIVERY, INSTALLATION, CONNECTION, DISCONNECTION, REMOVAL, RELOCATION, REPAIR, REPLACEMENT, TESTING AND COMMISSIONING OF ALL EQUIPMENT AND DEVICES INCLUDED IN OR NECESSARY FOR THE WORK, AS APPLICABLE. THIS INCLUDES SCAFFOLDING, LADDERS, RIGGING, HOISTING, ETC.

1.12 ELECTRICAL WORK SHALL INCLUDE ALL REQUIRED CUTTING, PATCHING AND THE FULL RESTORATION OF WALL AND FLOOR STRUCTURE AND SURFACES. ALL EQUIPMENT, WALLS, FLOORS, ETC., DISTURBED OR DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER, AT THE CONTRACTORS EXPENSE.

1.13 BEFORE SUBMITTING HIS BID, THE CONTRACTOR SHALL FULLY AQUAINT HIMSELF/HERSELF WITH THE JOB CONDITIONS AND DIFFICULTIES THAT WILL PERTAIN TO THE EXECUTION OF THIS WORK. SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN MADE. LATER CLAIMS WILL NOT BE RECOGNIZED FOR EXTRA LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED, WHICH COULD HAVE BEEN FORESEEN HAD SUCH AN EXAMINATION BEEN MADE.

1.14 THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING UTILITIES.

1.15 UPON COMPLETION OF THE ELECTRICAL WORK, THE CONTRACTOR SHALL TEST THE COMPLETE ELECTRICAL SYSTEM FOR SHORTS, GROUNDS, AND PROPER OPERATION, IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE.

1.16 UPON COMPLETION OF WORK, THE CONTRACTOR SHALL CLEAN AND ADJUST ALL EQUIPMENT AND LIGHTING AND TEST SYSTEMS TO THE SATISFACTION OF OWNER AND ENGINEER. RESULTS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

1.17 THE CONTRACTOR SHALL FIELD VERIFY DIMENSIONS OF FINISHED CONSTRUCTION PRIOR TO FABRICATION AND INSTALLATION OF FIXTURES AND EQUIPMENT.

1.18 EXACT ROUTING OF CONDUITS AND "MC" CABLES SHALL BE DETERMINED IN THE FIELD.

1.19 IF THE OWNER AND/OR HIS REPRESENTATIVE CONSIDERS ANY WORK TO BE INFERIOR, THE RESPECTIVE CONTRACTOR SHALL REPLACE SAME WITH CONTRACT STANDARD WORK WITHOUT ADDITIONAL CHARGE. ALL WORK SHALL BE DONE IN A NEAT, WORKMANLIKE MANNER, LEFT CLEAN AND FREE FROM DEFECTS, AND COMPLETELY OPERABLE.

1.20 THE CONTRACTOR SHALL PROVIDE ALL MATERIALS AS SHOWN ON THE DRAWINGS AND/OR AS SPECIFIED. ALL MATERIALS SHALL BE NEW, AND BEAR THE UL LABEL. ALL WORK SHALL BE GUARANTEED BY THE CONTRACTOR FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF ACCEPTANCE BY THE OWNER.

1.21 DRAWINGS ARE TO BE CONSIDERED DIAGRAMMATIC, AND SHALL BE FOLLOWED AS CLOSELY AS CONDITIONS ALLOW TO COMPLETE THE INTENT OF THE CONTRACT. THE DRAWINGS AND SPECIFICATIONS COMPLIMENT ONE ANOTHER, AND WHAT IS SHOWN ON THE DRAWINGS AND NOT MENTIONED IN THE SPECIFICATIONS, AND VICE VERSA, IS TO BE INCLUDED IN THE SCOPE OF WORK.

1.22 ALL EQUIPMENT CONNECTIONS SHALL BE INSTALLED PER APPLICABLE SEISMIC REQUIRMENTS.

1.23 ENGINEER WILL MAKE A FINAL INSPECTION WITH THE OWNER AND CONTRACTOR AND WILL NOTIFY THE CONTRACTOR IN WRITING OF ALL PARTICULARS IN WHICH THIS INSPECTION REVEALS THAT THE WORK IS INCOMPLETE OR DEFECTIVE. THE CONTRACTOR SHALL IMMEDIATELY TAKE SUCH MEASURES AS ARE NECESSARY TO COMPLETE SUCH WORK OR REMEDY SUCH DEFICIENCIES.

1.24 THE CONTRACTOR SHALL PERFORM ALL EXCAVATION, TRENCHING AND BACKFILL REQUIRED FOR ELECTRICAL WORK. BACKFILL SHALL BE SUITABLE MATERIAL PROPERLY COMPACTED TO 95% DENSITY IN EACH LAYER OF SIX (6) INCH DEPTH. CONDUIT SHALL BE MINIMUM 30" BELOW FINISHED GRADE.

SUNVEST
Developing • Renewable • Relationships
(262) 547-1200 www.sunvest.com
N27 W24025 PAUL CT. SUITE 100
PEWAUKEE, WI 53072
PHONE: (262)-547-1200
WWW.SUNVEST.COM

PROFESSIONAL ENGINEER STAMPS

ISSUANCE:
10% PRELIMINARY PLAN SET

LICENSED ELECTRICAL ENGINEER certifies that they prepared all the electrical "E" sheets in this drawing set.
LICENSED STRUCTURAL ENGINEER certifies that they prepared all of the structural "S" sheets in this drawing set.
LICENSED CIVIL ENGINEER certifies that they prepared all of the civil "C" sheets in this drawing set.
It should be noted that any plan sheets not identified above have been prepared and certified by others and have been included herein for informational purposes only.

10		21	
9		20	
8		19	
7		18	
6	05/06/26	17	
5	03/31/26	16	
4	06/17/24	15	
3	05/22/24	14	
2	05/21/24	13	
1	03/07/24	12	
0	04/12/23	11	
REV	SET/DATE	REV	SET/DATE

DRAWN BY: TG	CHECKED BY: BN
SCALE: AS NOTED	JOB NO: 01953

WATERTOWN HOPS

1224 AMERICAN WAY
WATERTOWN, WI 53094

SHEET TITLE

GENERAL NOTES AND SYMBOLS

DWG. NO.
22
G-1.00

GENERAL NOTES:

2. PROJECT COORDINATION:

2.1 THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS AT THE SITE AND NOTIFY THE OWNER OF ANY DISCREPANCIES, PRIOR TO COMMENCING WITH THE WORK.

2.2 THE CONTRACTOR SHALL REVIEW AND COORDINATE WITH THE DOCUMENTS OF ALL TRADES.

2.3 THE CONTRACTOR SHALL FURNISH A SCHEDULE INDICATING HIS PORTION OF TIME, WITHIN THE OVERALL SCHEDULE, REQUIRED TO COMPLETE THE WORK, IN CONJUNCTION WITH ALL TRADES. ALL WORK THAT MAY AFFECT OPERATION OF BUILDING SYSTEMS SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE.

2.4 SHUT DOWN OF POWER SHALL BE COORDINATED WITH THE OWNER, ARCHITECT AND PROJECT MANAGER AT LEAST 14 WORKING DAYS PRIOR TO SHUT DOWN. SHUT DOWNS LONGER THAN 2 DAYS SHALL BE COORDINATED WITH THE ABOVE PERSONNEL AT LEAST ONE MONTH IN ADVANCE. TEMPORARY POWER FOR CONSTRUCTION SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR FOR SHUT DOWNS OVER 2 DAYS.

2.5 ALL CONDUITS AND DEVICE BOXES SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR, INCLUDING ALL TECHNOLOGY CONDUITS AND BOXES.

2.6 EXACT LOCATIONS OF OUTLETS AND EQUIPMENT SHALL BE COORDINATED WITH ARCHITECTURAL AND MILLWORK PLANS. ALL OUTLET AND EQUIPMENT LAYOUTS SHALL BE VERIFIED AND COORDINATED WITH WORK OF OTHER TRADES.

2.7 PROVIDE TEMPORARY LIGHTING AND POWER IN ACCORDANCE WITH ARTICLE 305 OF THE NEC. TEMPORARY LIGHTING FIXTURES IN UNFINISHED AREAS SHALL REMAIN CONNECTED UNTIL REMOVAL IS REQUESTED BY THE CONTRACTOR.

2.8 THE CONTRACTOR SHALL CONTACT THE BUILDING MANAGER TO OBTAIN A COPY OF THE GENERAL REQUIREMENTS AND/OR CONDITIONS TO BE USED FOR THIS PROJECT.

3. CONNECTORS:

3.1 DO NOT CROSS MATE CONNECTORS ON ANY SYSTEM. ENSURE THAT CONNECTOR SELECTION MEETS THE LEGAL BASIS THE EXCLUDE CROSS-CONNECTIONS OF:

- PRODUCT NORMS ((IEC 62852 (EN62852)) AND UL 6703 PRODUCT NORM RESP. UL 1703 MODULE NORM
- INSTALLATION NORMS AND LOCAL REGULATIONS
- ASSEMBLY INSTRUCTIONS OF THE MANUFACTURER

VALID PV STANDARDS (IEC 60364-7-712:2017; E343181) STATE THAT "MALE AND FEMALE CONNECTORS [...] SHALL BE OF THE SAME TYPE FROM THE SAME MANUFACTURER" AND THAT UL CERTIFICATION FOR CONNECTORS ONLY APPLIES IF PRODUCTS FROM THE SAME PRODUCT FAMILY HAVE BEEN MATED

4. WARRANTIES:

4.1 ALL MATERIALS AND EQUIPMENT SHALL BE GUARANTEED IN WRITING FOR A MINIMUM OF ONE YEAR AFTER FINAL ACCEPTANCE BY OWNER.

4.2 WORKMANSHIP SHALL BE GUARANTEED IN WRITING FOR A MINIMUM OF 5 YEARS AFTER FINAL ACCEPTANCE BY OWNER

4.3 OBTAIN AND DELIVER TO THE OWNER'S REPRESENTATIVE ALL GUARANTEES AND CERTIFICATES OF COMPLIANCE.

5. PERMITS:

5.1 CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND INSPECTION FEES FOR ELECTRICAL WORK.

6. RACEWAYS:

6.1 ALL CONDUIT SHALL BE MINIMUM SIZE OF 1/2" FOR POWER CIRCUITS AND CONTROL CIRCUITS EXCEPT WHERE FLEXIBLE CONDUIT IS CALLED FOR ON PROJECT DOCUMENTS. ALL EXTERIOR EXPOSED CONDUIT SHALL BE PVC. ALL UNDERGROUND, IN SLAB OR UNDER SLAB SHALL BE SCH. 40 PVC. CHANGE TO SCH. 80 PVC CONDUIT BEFORE EXITING OUT OF UNDERGROUND SECTIONS. EMT IS ALLOWED IN INTERIOR DRY LOCATIONS WHERE NOT SUBJECT TO DAMAGE.

6.2 ALL FLEXIBLE CONDUIT IN WET OR DRY AREAS SHALL BE LIQUID TIGHT CONDUIT. NONMETALLIC FLEXIBLE CONDUIT IS SPECIFICALLY PROHIBITED.

6.3 CONDUIT SHALL BE RUN AT RIGHT ANGLES AND PARALLEL TO BUILDING LINES, SHALL BE NEATLY RACKED AND SECURELY FASTENED. JUNCTION BOXES SHALL BE PROVIDED WHERE REQUIRED TO FACILITATE INSTALLATION OF WIRES.

6.4 ALL CONDUIT AND ELECTRICAL EQUIPMENT SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE IN AN APPROVED MANNER.

6.5 ALL EMPTY RACEWAYS SHALL BE FURNISHED WITH A 200 LB. TEST NYLON DRAG LINE.

6.6 ARRANGEMENT OF CONDUIT AND EQUIPMENT SHALL BE AS INDICATED, UNLESS MODIFICATION IS REQUIRED TO AVOID INTERFERENCES.

6.7 ALL RACEWAY AND WIRING SHALL BE CONCEALED IN FINISHED AREAS. RACEWAY IN MECHANICAL ROOMS, BASEMENTS AND CRAWL SPACES MAY BE SURFACE MOUNTED.

6.8 FOR CONDUITS CROSSING EXPANSION JOINTS, PROVIDE EXPANSION FITTINGS FOR SIZE 1-1/4", AND LARGER. PROVIDE SECTIONS OF FLEXIBLE CONDUIT WITH GROUNDING JUMPERS FOR SIZES 1" AND SMALLER.

6.9 THE CONTRACTOR SHALL SEAL ALL PENETRATIONS THROUGH FIRE RATED WALLS AND FLOORS WITH APPROVED FIRE RATED SEALANT. ALL PENETRATIONS THROUGH ALL WALLS AND FLOORS SHALL BE SEALED. FOR ALL SLAB PENETRATIONS THE METHOD, DEPTHS AND LOCATIONS SHALL BE PRE-APPROVED BY THE BUILDING ENGINEER PRIOR TO THE START OF WORK.

6.10 THE CONTRACTOR SHALL INSTALL DETECTABLE UNDERGROUND TAPES FOR THE PROTECTION, LOCATION AND IDENTIFICATION OF UNDERGROUND CONDUIT INSTALLATION.

6.11 EXACT ROUTING OF CONDUITS AND CABLES SHALL BE DETERMINED IN FIELD.

6.12 ALL PENETRATIONS THROUGH FLOORS SHALL BE FIRE STOPPED AND SEALED WITH APPROVED SEALANT.

6.13 ELECTRICAL RACEWAY CONNECTIONS TO VIBRATING EQUIPMENT AND MACHINERY, SHALL BE MADE WITH FLEXIBLE LIQUID TIGHT METALLIC CONDUIT.

6.14 SECURE ALL SUPPORTS TO BUILDING STRUCTURE UTILIZING TOGGLE BOLTS IN HOLLOW MASONRY, EXPANSION SHIELDS OR INSERTS IN CONCRETE AND BRICK. MACHINE SCREWS IN METAL, BEAM CLAMPS IN FRAMEWORK AND WOOD SCREWS IN WOOD. NAILS, RAWL PLUGS AND WOOD PLUGS ARE NOT PERMITTED. WHERE REQUIRED BY STRUCTURE, PROVIDE THRU BOLTS AND FISH PLATES. SUPPORT RACEWAY RISERS AT EACH FLOOR LEVEL. RUN EXPOSED RACEWAYS PARALLEL WITH OR AT RIGHT ANGLES TO BUILDING LINES.

6.15 DO NOT RUN RACEWAYS CLOSER THAN 6 INCHES WHEN PARALLEL TO HOT WATER OR STEAM PIPES. WHEN CROSSING WATER OR STEAM PIPES CROSS A MINIMUM OF 3 INCHES ABOVE. IF CROSSING BELOW IS UNAVOIDABLE, PROVIDE DRIP SHIELDS EXTENDING 6 INCHES BEYOND THE WATER OR STEAMPIPE. BOXES INSTALLED IN PROXIMITY TO WATER OR STEAM PIPE SHALL BE RATED NEMA 4X.

7. BOXES:

7.1 INTERIOR JUNCTION BOXES SHALL BE SHEET STEEL. EXTERIOR JUNCTION BOXES SHALL BE NONMETALLIC, WITH SCREW COVERS. BOXES SHALL BE SUPPORTED INDEPENDENTLY OF CONDUITS.

8. WIRING:

8.1 ALL WIRE SHALL BE MADE OF COPPER WITH INSOLATION SUITABLE FOR THE APPLICABLE ENVIROMENT AND VOLTAGE. CONTRACTOR SHALL GET APPROVAL FOR ANY OTHER WIRE TYPE.

8.2 UNDER NO CIRCUMSTANCES SHALL FEEDERS BE SPLICED.

8.3 ALL ELECTRICAL TERMINAL TEMPERATURE RATINGS ASSUMED TO BE 75° C UNLESS SITE CONDITIONS REQUIRE OTHERWISE.

8.4 WIRE SIZES SHALL BE INCREASED WHERE NECESSARY TO LIMIT AC VOLTAGE DROP TO 1.5% TOTAL FROM INVERTER TO POINT OF COMMON COUPLING

9. GROUNDING:

9.1 PROVIDE A COMPLETE EQUIPMENT GROUND SYSTEM FOR THE ELECTRICAL SYSTEM AS REQUIRED BY ARTICLE 250 AND 690, OF THE NEC, AND AS SPECIFIED HEREIN.

9.2 ALL BRANCH CIRCUITS AND FEEDERS FOR POWER WIRING SHALL CONTAIN A COPPER GROUND WIRE. NO FLEXIBLE METAL CONDUIT OF ANY KIND OR LENGTH SHALL BE USED AS THE EQUIPMENT GROUNDING CONDUCTOR.

10. MECHANICAL SYSTEMS POWER:

10.1 DISCONNECT SWITCHES SHALL BE HEAVY DUTY, QUICK MAKE, QUICK BREAK TYPE, ENCLOSED IN A HEAVY SHEET METAL ENCLOSURE WITH HINGED INTERLOCKING COVER, IN PROPER NEMA RATED ENCLOSURES. FUSED OR NON-FUSED AS REQUIRED. DISCONNECT SWITCHES SHALL BE PROVIDED BY CONTRACTOR, EXCEPT AS NOTED ON DRAWINGS.

10.2 THE RATING FOR DISCONNECT SWITCHES SHALL BE THE SAME AS, OR GREATER THAN, THE PROTECTIVE DEVICE SERVING THE EQUIPMENT.

10.3 A STRUT FRAME SHALL BE PROVIDED AT ALL LOCATIONS WHERE STRUCTURE WILL NOT ADEQUATELY SUPPORT EQUIPMENT, OR FOR FREESTANDING EQUIPMENT.

11. PANEL BOARDS:

11.1 PANELBOARDS: SWITCHING UNITS SHALL BE 3 PHASE, 4 WIRE CIRCUIT BREAKER TYPE UNLESS OTHERWISE NOTED. BUS BARS SHALL BE HARD DRAWN COPPER, MINIMUM 98% CONDUCTIVITY, AND SILVER OR TIN-PLATED JOINTS. CABINETS SHALL BE GALVANIZED SHEET STEEL BACK BOX, WITH DOOR AND TRIM AND LAPPED AND WELDED CORNERS. HARDWARE SHALL BE CHROME-PLATED WITH FLUSH LOCK/LATCH HANDLE ASSEMBLY (UP TO 48 IN. HIGH DOORS) OR VAULT HANDLE, LOCK AND 3-POINT CATCH (LARGER THAN 48 IN. HIGH DOORS). HINGES SHALL BE SEMI-CONCEALED, 5-KNUCKLE STEEL WITH NONFRERROUS PINS, 180-DEG OPENING, LOCATED A MAXIMUM 26 IN. ON CENTERS. PROVIDE DOOR-IN-DOOR CONSTRUCTION. MINIMUM GUTTER SPACES FOR LIGHTING PANELS SHALL BE 5- BOTTOM. DIRECTORY HOLDER SHALL BE METAL FRAME WITH CLEAR PLASTIC, TRANSPARENT COVER.

11.2 PROVIDE A NEW TYPE WRITTEN CIRCUIT DIRECTORY FOR EACH PANEL AFFECTED BY THIS PROJECT.

11.3 WHEREVER POSSIBLE, PANELBOARDS SHALL BE RECESSED IN WALL. SURFACE MOUNTED PANELBOARDS SHALL BE MOUNTED ON A PLYWOOD BACKBOARD. PLYWOOD SHALL BE MOUNTED ON TOP OF GYMPSUM BOARD. PLYWOOD SHALL BE PAINTED ON ALL SIDES AND EDGES. COORDINATE WITH OWNER FOR COLOR.

11.4 PROVIDE LIGHTNING SURGE PROTECTION FOR MAIN SWITCHBOARD OR MAIN SERVICE PANEL BOARD. PROVIDE GROUNDING OF SURGE DEVICE PER THE NEC.

11.5 CONTRACTOR IS RESPONSIBLE FOR BALANCING LOADS ON ALL PHASES AND MAY ALTER ASSIGNMENT OF CIRCUITS FOR BALANCING PHASES.

11.6 CIRCUIT SCHEDULES ARE INTENDED TO REPRESENT THE GENERAL WIRING NEEDS OF THE EQUIPMENT SERVICED FROM THE PANEL. THE EXACT CIRCUIT ARRANGEMENT WILL BE DETERMINED BY PANEL SHOP DRAWING AND ARRANGEMENT WILL BE DETERMINED BY PANEL SHOP DRAWING AND PANELS ACTUALLY FURNISHED.

12. IDENTIFICATION:

12.1 REFER TO NEC LABELS DRAWING FOR LABELING REQUIREMENTS

12.2 INSTALL NAMEPLATES ON ALL MAJOR EQUIPMENT, INCLUDE STARTERS, TRANSFORMERS, PANELBOARDS, DISCONNECT SWITCHES AND OTHER ELECTRICAL BOXES AND CABINETS INSTALLED UNDER THIS CONTRACT.

12.3 APPLY CABLE/CONDUCTOR IDENTIFICATION MARKERS ON EACH CABLE AND CONDUCTOR IN EACH BOX, ENCLOSURE OR CABINET.

13. RECORD DRAWINGS:

13.1 THE CONTRACTOR SHALL SUBMIT SIX (6) COPIES OF SHOP DRAWINGS. THE APPROVAL OF SHOP DRAWINGS SHALL ONLY BE CONSTRUED TO APPLY TO THE GENERAL LAYOUT AND CONFORMANCE TO THE DESIGN CONCEPT OF THE PROJECT AND FOR THE COMPLIANCE WITH THE GENERAL REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL RETAIN THE RESPONSIBILITY FOR ANY DEVIATIONS FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

13.2 PROVIDE SHOP DRAWINGS FOR THE LIGHTING FIXTURES, PANEL BOARDS, CIRCUIT BREAKERS, WIRING DEVICES, FIRE ALARM DEVICES AND SEALS FOR FIRE AND WATER STOPPING.

13.3 DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN A RECORD SET OF INSTALLATION PRINTS. HE SHALL NEATLY AND CLEARLY RECORD ON THESE PRINTS ALL DEVIATIONS FROM THE CONTRACT DRAWINGS IN SIZES, LOCATIONS AND DETAILS.

13.4 UPON PROJECT COMPLETION, THE CONTRACTOR SHALL COMPLETE THE MARK UP OF ALL PROJECT DRAWINGS TO RECORD INSTALLED CONDITIONS.

13.5 REPRODUCIBLE "RECORD" DRAWINGS PREPARED IN CAD FORMAT SHALL BE PROVIDED AS INSTALLED CONDITIONS OF THE WORK. A FULL SIZE PRINT OUT OF THE "RECORD" DRAWING FILE SHALL BE PROVIDED AFTER COMPLETION OF THE INSTALLATION.

13.6 UPON COMPLETION AND ACCEPTANCE OF WORK, THE CONTRACTOR SHALL FURNISH WRITTEN INSTRUCTIONS AND EQUIPMENT MANUALS AND DEMONSTRATE THE PROPER OPERATIONS AND MAINTENANCE OF ALL EQUIPMENT AND APPARATUS FURNISHED UNDER THIS CONTRACT.

14. PROTECTION OF WORK:

14.1 EFFECTIVELY PROTECT ALL MATERIALS AND EQUIPMENT FROM ENVIRONMENTAL AND PHYSICAL DAMAGE UNTIL FINAL ACCEPTANCE. CLOSE AND PROTECT ALL OPENINGS DURING CONSTRUCTION. PROVIDE NEW MATERIALS AND EQUIPMENT TO REPLACE ITEMS DAMAGED.

SUNVEST
Developing • Renewable • Relationships
(262) 547-1200 www.sunvest.com
N27 W24025 PAUL CT. SUITE 100
PEWAUKEE, WI 53072
PHONE: (262)-547-1200
WWW.SUNVEST.COM

PROFESSIONAL ENGINEER STAMPS

ISSUANCE:
10% PRELIMINARY PLAN SET

LICENSED ELECTRICAL ENGINEER certifies that they prepared all the electrical "E" sheets in this drawing set.
LICENSED STRUCTURAL ENGINEER certifies that they prepared all of the structural "S" sheets in this drawing set.
LICENSED CIVIL ENGINEER certifies that they prepared all of the civil "C" sheets in this drawing set.
It should be noted that any plan sheets not identified above have been prepared and certified by others and have been included herein for informational purposes only.

10		21	
9		20	
8		19	
7		18	
6	05/06/26	17	
5	03/31/26	16	
4	06/17/24	15	
3	05/22/24	14	
2	05/21/24	13	
1	03/07/24	12	
0	04/12/23	11	
REV	SET/DATE	REV	SET/DATE

DRAWN BY: TG	CHECKED BY: BN
SCALE: AS NOTED	JOB NO: 01953

WATERTOWN HOPS

1224 AMERICAN WAY
WATERTOWN, WI 53094

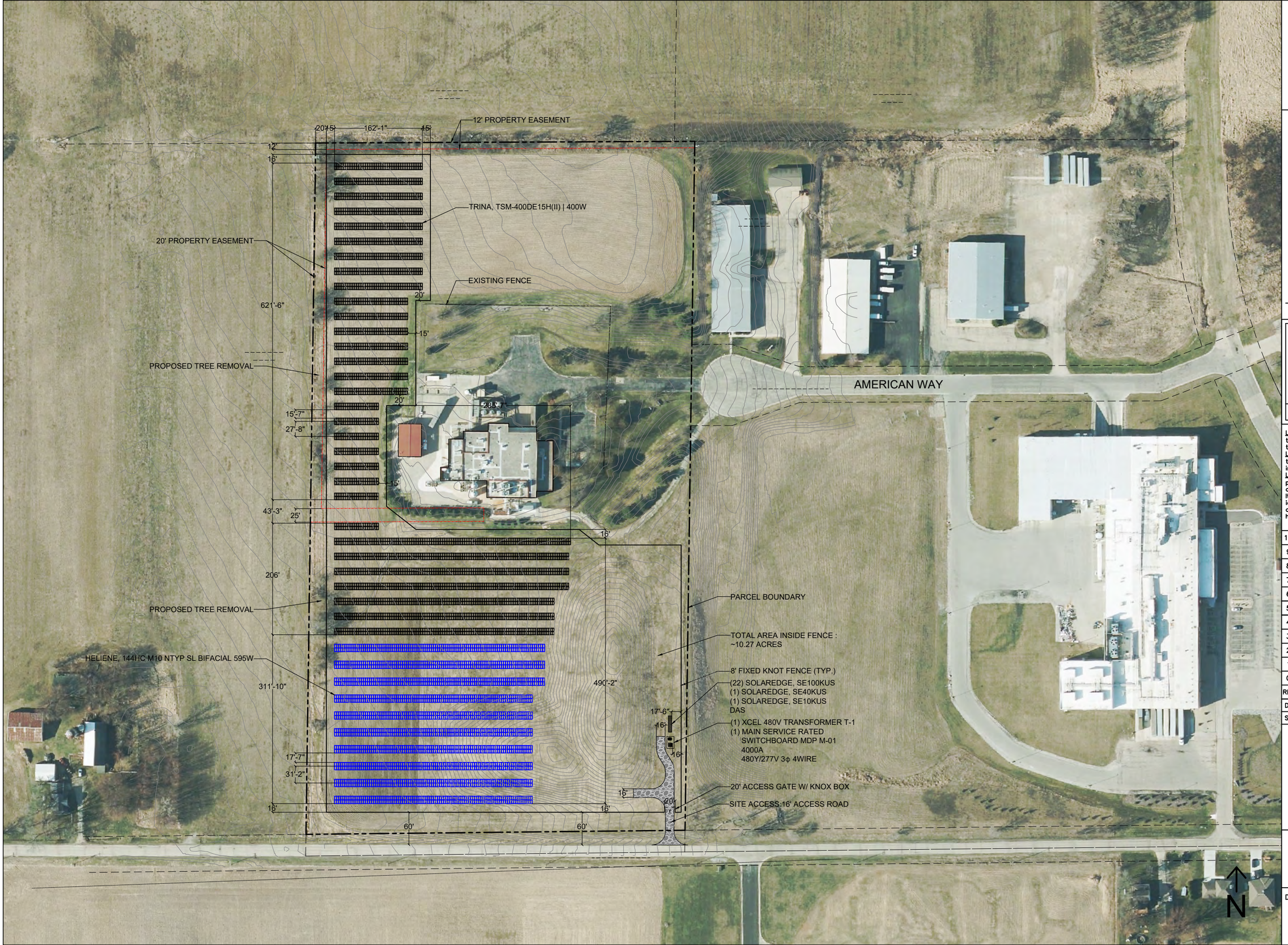
SHEET TITLE

GENERAL NOTES

DWG. NO.

G-2.00

SUNVEST
Developing • Renewable • Relationships
(262) 547-1200 www.sunvest.com
N27 W24025 PAUL CT. SUITE 100
PEWAUKEE, WI 53072
PHONE: (262)-547-1200
WWW.SUNVEST.COM



PROFESSIONAL ENGINEER STAMPS

ISSUANCE:

10% PRELIMINARY PLAN SET

SCALE: 1"=75'

LICENSED ELECTRICAL ENGINEER certifies that they prepared all the electrical "E" sheets in this drawing set.
LICENSED STRUCTURAL ENGINEER certifies that they prepared all of the structural "S" sheets in this drawing set.
LICENSED CIVIL ENGINEER certifies that they prepared all of the civil "C" sheets in this drawing set.
It should be noted that any plan sheets not identified above have been prepared and certified by others and have been included herein for informational purposes only.

10		21	
9		20	
8		19	
7		18	
6	05/06/26	17	
5	03/31/26	16	
4	06/17/24	15	
3	05/22/24	14	
2	05/21/24	13	
1	03/07/24	12	
0	04/12/23	11	
REV	SET/DATE	REV	SET/DATE

DRAWN BY: TG	CHECKED BY: BN
SCALE: AS NOTED	JOB NO: 01953

WATERTOWN HOPS

1224 AMERICAN WAY
WATERTOWN, WI 53094

SHEET TITLE

ARRAY LAYOUT

DWG. NO.

PV-1.00

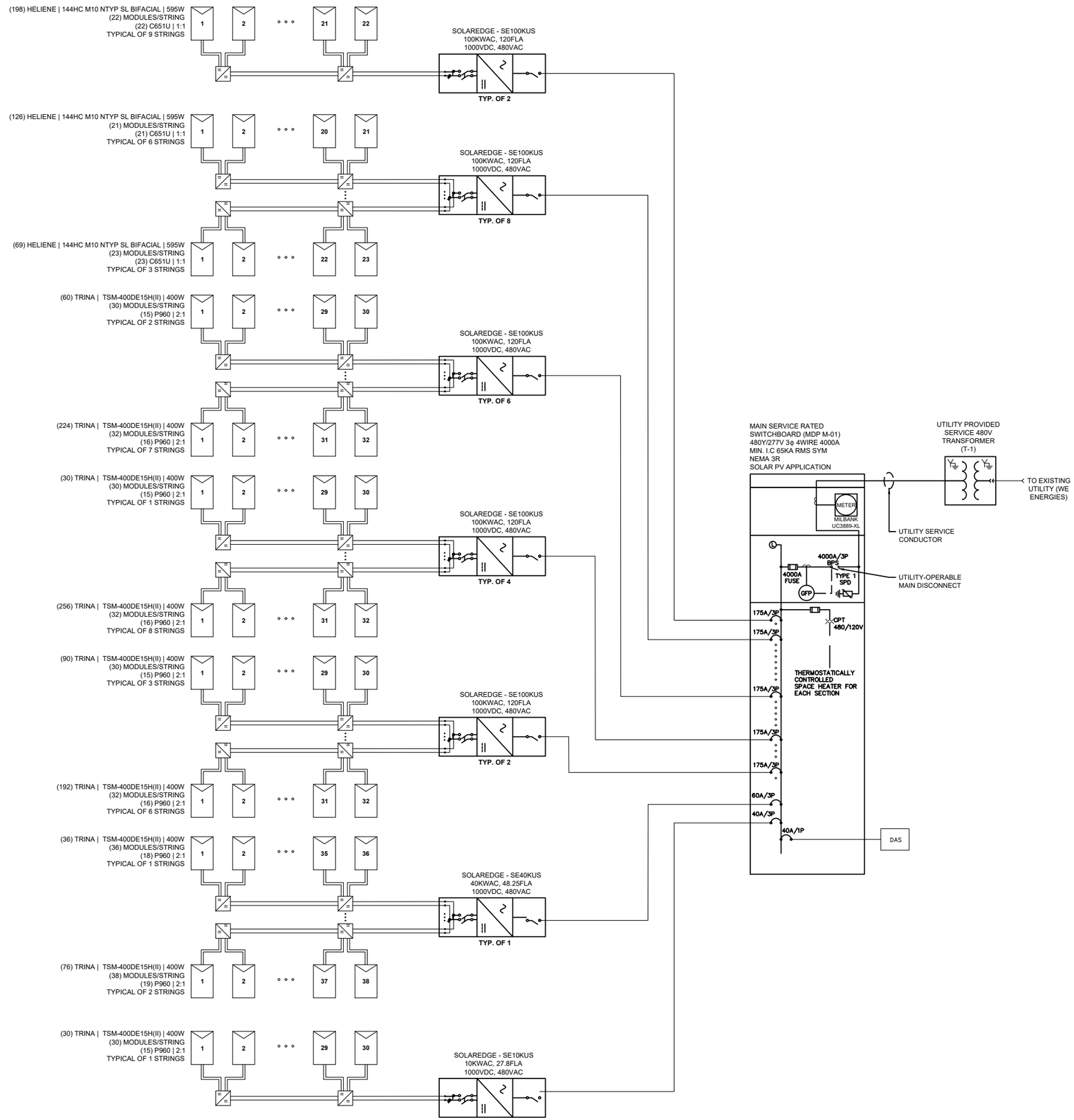
SUNVEST
Developing • Renewable • Relationships
(262) 547-1200 www.sunvest.com
N27 W24025 PAUL CT. SUITE 100
PEWAUKEE, WI 53072
PHONE: (262)-547-1200
WWW.SUNVEST.COM

PV SYSTEM DETAILS

ARRAY TYPE:	FIXED TILT
DC SYSTEM SIZE:	2.58542 MW DC
DC SYSTEM VOLTAGE:	1000 V
AC SYSTEM SIZE:	2.25 MVA @PF=1
MODULES	(3,554) TRINA TSM-DE15H(II) 400W (1,956) HELIENE 144HC M10 NTYP SL BIFACIAL 595W
INVERTERS:	SOLAREDGE, (22) SE100KUS, (1) SE40KUS, (1) SE10KUS
OPTIMIZERS:	(1,777) SOLAREDGE, P960, 2:1 (1,956) SOLAREDGE, C651U, 1:1
RACKING:	DCE
CLAMPS:	N/A
AZIMUTH:	180°
ARRAY PITCH:	25°
ARRAY TILT TRINA:	27'-8" CENTER SPACING (TRINA 400W)
ARRAY TILT HELIENE:	31'-2" CENTER SPACING (HELIENE 595W)
DC/AC RATIO:	1.149

GENERAL NOTES:

1. SWITCHBOARD TERMINATION COMPARTMENT AND METERING CT COMPARTMENT SHALL BE PROVIDED PER WE ENERGIES REQUIREMENTS. FOR CT METERING COMPARTMENT REFER TO ELECTRIC SERVICE AND METERING MANUAL M-22
2. SWITCHBOARD MAIN DISCONNECT SHALL MEET THE REQUIREMENTS OF CUSTOMER-OWNED GENERATION MANUAL PAGE 19 AND 20.



PROFESSIONAL ENGINEER STAMPS

ISSUANCE:

10% PRELIMINARY PLAN SET

LICENSED ELECTRICAL ENGINEER certifies that they prepared all the electrical "E" sheets in this drawing set.
LICENSED STRUCTURAL ENGINEER certifies that they prepared all of the structural "S" sheets in this drawing set.
LICENSED CIVIL ENGINEER certifies that they prepared all of the civil "C" sheets in this drawing set.
It should be noted that any plan sheets not identified above have been prepared and certified by others and have been included herein for informational purposes only.

REV	SET/DATE	REV	SET/DATE
10		21	
9		20	
8		19	
7		18	
6	05/06/26	17	
5	03/31/26	16	
4	06/17/24	15	
3	05/22/24	14	
2	05/21/24	13	
1	03/07/24	12	
0	04/12/23	11	

DRAWN BY: TG | CHECKED BY: BN
SCALE: AS NOTED | JOB NO: 01953

WATERTOWN HOPS

1224 AMERICAN WAY
WATERTOWN, WI 53094

SHEET TITLE

ONE LINE DIAGRAM

DWG. NO.

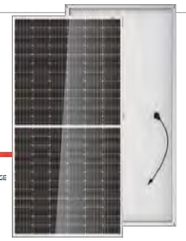
E-1.00

Mono Multi Solutions

THE

TALLMAX™

FRAMED 144 HALF-CELL MODULE



144-Cell
MONOCRYSTALLINE MODULE

380-410W
POWER OUTPUT RANGE

20.2%
MAXIMUM EFFICIENCY

0~+5W
POSITIVE POWER TOLERANCE

Founded in 1997, Trina Solar is the world's leading total solution provider for solar energy. With local presence around the globe, Trina Solar is able to provide exceptional service to each customer in each market and deliver our innovative, reliable products with the backing of Trina as a strong, bankable brand. Trina Solar now distributes its PV products to over 100 countries all over the world. We are committed to building strategic, mutually beneficial collaborations with installers, developers, distributors and other partners in driving smart energy together.

Comprehensive Products and System Certificates

IEC61215/IEC61730/IEC61701/IEC62716
ISO9001: Quality Management System
ISO14001: Environmental Management System
ISO14064: Greenhouse Gases Emission Verification
OHSAS18001: Occupational Health and Safety Management System

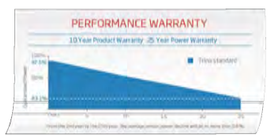
PRODUCTS	COLOR OF FRAME	POWER RANGE
TSM-DE15H(II)	Silver	385-410W

High power output
- Reduce BOS cost with high power bin and 1500V system voltage
- New cell string layout and split J-box location reduces the energy loss caused by inter-row shading
- Lower resistance of half-cut cells ensures higher power

High energy generation, low LCOE
- Excellent 3rd party validated IAM and low light performance with cell process and module material optimization
- Integrated LRF(Light Redirecting Film) to enhance power
- Low P_{max} temp coefficient (-0.36%) increases energy production
- Better anti-shading performance and lower operating temperature

Certified to perform in highly challenging environments
- High PID resistance through cell process and module material control
- Resistant to salt, acid, sand, and ammonia
- Certified to 5400 Pa positive load and 2400 Pa negative load

Easy to install, wide application
- Frame design enables compatibility with standard installation methods
- Deployable for ground mounted and rooftop projects
- Safe and easy to transport, handle, and install



Trinasolar

144HC M10 NTYP SL Bifacial Module

HELIENE

144HC M10 NTYP SL Bifacial Module

144 Half-Cut Monocrystalline 565W – 595W

23.02%
Utilizes the latest M10 size super high efficiency N-type silicon solar cells. Half cut design further reduces cell to module (CTM) losses.

Stability & Looks
3.2mm fully tempered frontside glass for superior hail resistance. Enhanced frame design to withstand higher wind, snow, and other mechanical stresses. Framed Glass-Backsheet aesthetic is ideal for high visibility

High Energy Yield
Highest efficiency, Excellent Bifaciality & Low temperature coefficient of N-type Silicon Solar Cells enable High Energy yield

High Reliability
N-type silicon solar cells result in low LID, reducing annual degradation and guaranteeing more power throughout the lifetime.

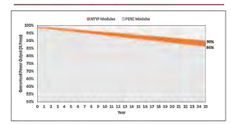
Intertek

Highly efficient N-type Silicon Solar Cells

Low LCOE enabled by High Power Output & Low BOS Cost

1% First year degradation & 0.4% Annual Power degradation

No Compromise Guarantee
15 Year Product Warranty
25 Year Linear Performance Guarantee



World-class Quality
- Heliene's fully automated manufacturing facilities with state-of-the-art robotics and computer aided inspection systems ensure the highest level of product quality and consistency
- All manufacturing locations are compliant with international quality standards and are ISO 9001 certified
- Heliene modules have received Top Performer rankings in several categories from PV Evolution Labs (PV EL) independent quality evaluations

Bankable Reputation
- Established in 2010, Heliene is recognized as highly bankable Tier 1 manufacturer of solar modules and has been approved for use by the U.S. Department of Defense, U.S. Army Corps of Engineers and from numerous top tier utility scale project debt providers
- By investing heavily in research and development, Heliene has been able to stay on the cutting edge of advances in module technology and manufacturing efficiency

Local Sales, Service, and Support
- With sales offices across the U.S. and Canada, Heliene prides itself on unsurpassed customer support for our clients. Heliene has become the brand of choice for many of the leading residential Installers, developers and Independent Power Producers due to our innovative technology, product customization capability and just in time last-mile logistics support
- Local sales and customer support means answered phone calls and immediate answers to your technical and logistics questions. We understand your project schedules often change with little warning and endeavor to work with you to solve your project management challenges

www.heliene.com

Three Phase Inverter with Synergy Technology

For the 277/480V Grid for North America

SE80KUS / SE100KUS / SE110KUS / SE120KUS

INVERTER

Powered by unique pre-commissioning process for rapid system installation

- Pre-commissioning feature for automated validation of system components and wiring during the site installation process and prior to grid connection
- Easy 2-person installation with lightweight, modular design (each inverter consists of 2 or 3 Synergy units and 1 Synergy Manager)
- Independent operation of each Synergy unit enables higher uptime and easy serviceability
- Built-in thermal sensors detect faulty wiring, ensuring enhanced protection and safety
- Built-in arc fault protection and rapid shutdown
- Built-in PID mitigation for maximized system performance
- Monitored* and field-replaceable surge protection devices, to better withstand surges caused by lightning or other events
- Built-in module-level monitoring with Ethernet or cellular communication for full system visibility

*Applicable only for DC and AC SPDs

solaredge.com

solaredge

Three Phase Inverter with Synergy Technology

For the 277/480V Grid for North America

SE80KUS / SE100KUS / SE110KUS / SE120KUS

MODEL NUMBER		SE80KUS	SE100KUS	SE110KUS	SE120KUS	
APPLICABLE TO INVERTERS WITH PART NUMBER		SExxK-USx8Ixxxx				UNITS
INSTALLATION SPECIFICATIONS						
Number of Synergy Units per Inverter		2	3			
Ac Max Conduit Size		2 ½"				in
Max AWG Line / PE		4/0 / 1/0				
DC Max Conduit Size		1 x 3"; 2 x 2"				in
DC Input Inverter/ Synergy Unit	Multi-Input (SExxK-US0000Z4)	8 / 4 pairs; 6-12 AWG	12 / 4 pairs; 6-12 AWG			
	Combined Input (SExxK-US0000W4)	2 pairs / 1 pair, Max 2 AWG; copper or aluminum	3 pairs / 1 pair, Max 2 AWG; copper or aluminum			
Dimensions (H x W x D)		Synergy Unit: 22 x 12.9 x 10.75 / 558 x 328 x 273 Synergy Manager: 14.17 x 22.4 x 11.6 / 360 x 560 x 295				in / mm
Weight		Synergy Unit: 70.4 / 32 Synergy Manager: 39.6 / 18				lb / kg
Operating Temperature Range		-40 to +140 / -40 to +60(4)				°F / °C
Cooling		Fan (user replaceable)				
Noise		< 67				dBA
Protection Rating		NEMA 3R				
Mounting		Brackets provided				

(4) For power de-rating information refer to the Temperature Derating Technical Note for North America.

SolarEdge is a global leader in smart energy technology. By leveraging world-class engineering capabilities and with a relentless focus on innovation, SolarEdge creates smart energy solutions that power our lives and drive future progress.

SolarEdge developed an intelligent inverter solution that changed the way power is harvested and managed in photovoltaic (PV) systems. The SolarEdge DC optimized inverter maximizes power generation while lowering the cost of energy produced by the PV system.

Continuing to advance smart energy, SolarEdge addresses a broad range of energy market segments through its PV, storage, EV charging, UPS, and grid services solutions.

SolarEdge
@SolarEdgePV
@SolarEdgePV
SolarEdgePV
SolarEdge
www.solaredge.com/corporate/contact

solaredge.com

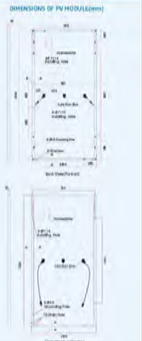
© SolarEdge Technologies, Ltd. All rights reserved. SOLAREDGE, the SolarEdge logo, OPTIMIZED BY SOLAREDGE are trademarks or registered trademarks of SolarEdge Technologies, Inc. All other trademarks mentioned herein are trademarks of their respective owners. Date: May 8, 2024 DS-000020-NAM Subject to change without notice.

Cautionary Note Regarding Market Data and Industry Forecasts: This brochure may contain market data and industry forecasts from certain third-party sources. This information is based on industry surveys and the preparer's expertise in the industry and there can be no assurance that any such market data is accurate or that any such industry forecasts will be achieved. Although we have not independently verified the accuracy of such market data and industry forecasts, we believe that the market data is reliable and that the industry forecasts are reasonable.

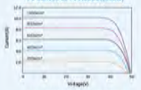
solaredge

TALLMAX™ FRAMED 144 HALF-CELL MODULE

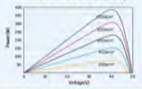
DIMENSIONS OF PV MODULE(mm)



I-V CURVES OF PV MODULE(390W)



P-V CURVES OF PV MODULE(390W)



ELECTRICAL DATA (STC)

Peak Power Watts-Pmax (Wp)*	380	385	390	395	400	405	410
Power Output Tolerance-Pmax (W)	0 ~ +5						
Maximum Power Voltage-Vmp (V)	39.6	40.1	40.5	40.9	41.1	41.4	41.7
Maximum Power Current-Imp (A)	9.59	9.61	9.64	9.66	9.74	9.79	9.84
Open Circuit Voltage-Voc (V)	48.1	48.5	49.7	50.1	50.4	50.8	51.2
Short Circuit Current-Isc (A)	9.99	10.03	10.08	10.13	10.18	10.23	10.29
Module Efficiency-ηm (%)	18.7	18.9	19.2	19.4	19.7	19.9	20.2

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.
*Measurement tolerance: ±3%.

ELECTRICAL DATA (NMOT)

Maximum Power-Pmax (Wp)	287	291	296	299	303	307	311
Maximum Power Voltage-Vmp (V)	37.6	37.9	38.8	38.9	39.1	39.4	39.7
Maximum Power Current-Imp (A)	7.64	7.68	7.66	7.70	7.74	7.78	7.82
Open Circuit Voltage-Voc (V)	45.4	45.8	46.9	47.3	47.6	47.9	48.3
Short Circuit Current-Isc (A)	8.05	8.08	8.12	8.16	8.20	8.24	8.29

NMOT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

MECHANICAL DATA

Solar Cells	Monocrystalline
Cell Orientation	144 cells (6 × 24)
Module Dimensions	2024 × 1004 × 35 mm (79.69 × 39.53 × 1.38 inches)
Weight	22.8kg (50.3lb)
Glass	3.2 mm (0.13 inches), High Transmission, AR Coated Heat Strengthened Glass
Encapsulant Material	EVA
Backsheet	White
Frame	35 mm (1.38 inches) Anodized Aluminum Alloy
J-Box	IP68 rated
Cables	Photovoltaic Technology Cable 4.0mm² (0.006inches²) Portrait: N 140mm/P 285mm (5.51/11.22 inches) Landscape: N 1400 mm/P 1400 mm (55.12/55.12 inches)
Connector	Trina T54

TEMPERATURE RATINGS

NMOT (Nominal Module Operating Temperature)	41°C (± 2°C)
Temperature Coefficient of Pmax	- 0.36%/°C
Temperature Coefficient of Voc	- 0.26%/°C
Temperature Coefficient of Isc	0.04%/°C

MAXIMUM RATINGS

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC (IEC)
	1000V DC (UL)
Max Series Fuse Rating	25A

(Do not connect Fuse in Combiner Box with two or more strings in parallel connection)

WARRANTY

10 year Product Workmanship Warranty
25 year Power Warranty

(Please refer to product warranty for details)

PACKAGING CONFIGURATION

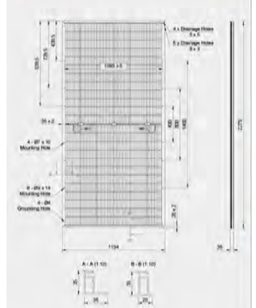
Modules per box: 30 pieces
Modules per 40' container: 660 pieces

Trinasolar

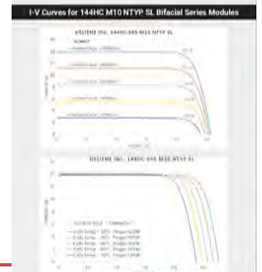
CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.
© 2019 Trina Solar Limited. All rights reserved. Specifications included in this datasheet are subject to change without notice.
Version number: TSM_DE15H(II)_EN_2019_D
www.trinasolar.com

144HC M10 NTYP SL Bifacial Module

Dimensions for 144HC M10 NTYP SL Bifacial Series Modules



I-V Curves for 144HC M10 NTYP SL Bifacial Series Modules



Electrical Data (STC)

Peak Rated Power*	P_{max} (W)	595	590	585	580	575	570	565
Maximum Power Voltage	V_{mp} (V)	45.23	44.96	44.93	44.74	44.48	44.24	43.98
Maximum Power Current	I_{mp} (A)	13.16	13.12	13.03	12.99	12.95	12.91	12.87
Open Circuit Voltage*	V_{oc} (V)	53.46	53.25	53.12	52.97	52.83	52.69	52.55
Short Circuit Current**	I_{sc} (A)	13.86	13.83	13.79	13.75	13.71	13.67	13.64
Module Efficiency	Eff (%)	23.02	22.83	22.64	22.44	22.25	22.06	21.86
Maximum Series Fuse Rating	MF (A)	30	30	30	30	30	30	30
Power Sorting Range		(0/+3%)						
Bifaciality Factor***		80 ± 5%						

STC - Standard Test Conditions: Irradiation 1000 W/m² - Air mass AM 1.5 - Cell temperature 25 °C.
*P_{max} Production Tolerance ± 3%, V_{oc} Production Tolerance ± 3%, I_{sc} Production Tolerance ± 4%
***Bifaciality Factor = P_{max_Rear} / P_{max_Front} where P_{max_Rear} and P_{max_Front} are tested at STC

Electrical Data (NMOT)

Maximum Power	P_{max} (W)	432	428	424	420	417	413	409
Maximum Power Voltage	V_{mp} (V)	43.28	43.05	43.02	42.84	42.59	42.36	42.11
Maximum Power Current	I_{mp} (A)	10.44	10.41	10.32	10.28	10.25	10.22	10.19
Open Circuit Voltage	V_{oc} (V)	51.13	50.99	50.86	50.72	50.59	50.45	50.32
Short Circuit Current	I_{sc} (A)	11.18	11.15	11.11	11.08	11.05	11.02	11.00

NMOT - Nominal Module Operating Temperature:
Irradiance at 800W/m², Ambient Temperature 20°C, Wind speed 1m/s

Mechanical Data

Solar Cells	144 Half Cut, M10c, N-type Cells
Module Construction	Framed Glass - Backsheet
Backsheet	Transparent Backsheet (White Pattern Optional)
Dimensions (L x W x D)	2279 x 1134 x 35 mm (89.72 x 44.65 x 1.38 inch)
Weight	29.2 kg (64.3 lbs)
Frame	Double Welded 15 Micron Anodized Aluminum Alloy
Glass	3.2mm Fully Tempered, High Transmission, PV Solar Glass with Anti Reflexive Coating
Junction Box	IP-68 rated with 3 bypass diodes
Output Cables	4mm² (12 AWG), 0.3 meter Symmetrical Cables - offer cable lengths optional
Connectors	Multi-Contact / Staubli MC4

Certifications

UL Certification	UL61215 UL61730, CSA C22.2 No. 61730

Temperature Ratings

Nominal Module Operating Temperature (NMOT)	+42°C (±2°C)
Temperature Coefficient of P_{max}	-0.35%/°C
Temperature Coefficient of V_{oc}	-0.25%/°C
Temperature Coefficient of I_{sc}	0.045%/°C

Maximum Ratings

Operational Temperature	-40°C to +85°C
Max System Voltage	1500V
Mech. Load Test (Front)	113 psf / 5400Pa
Mech. Load Test (Back)	50 psf / 2400Pa
Fire Type	Type1

Warranty

15 Year Product Warranty
25 Year Linear Power Guarantee

Packaging Configuration

Modules per Pallet 40' Container:	31 pieces
Modules per 40' Container:	620 pieces
Modules per Pallet 53' Trailer:	28 pieces
Modules per 53' Trailer:	644 pieces

HSPE_144HC_M10_NTYP_SL_Bifacial_Rev.02.pdf
Aug 20th, 2023

The specifications and key features contained in this datasheet may deviate slightly from our actual products due to the ongoing innovation and product enhancements. Heliene Inc. reserves the right to make necessary adjustment to the information described herein at any time without prior notice to customer. PV modules should be handled and installed only by qualified people. Please carefully read safety and installation instructions available for download from Heliene website before using Heliene PV modules. For warranty details, please refer to Product Warranty Document, also available for download from Heliene website.

Three Phase Inverter with Synergy Technology

For the 277/480V Grid for North America

SE80KUS / SE100KUS / SE110KUS / SE120KUS

MODEL NUMBER	SE80KUS	SE100KUS	SE110KUS	SE120KUS	
APPLICABLE TO INVERTERS WITH PART NUMBER	SExxK-USx8Ixxxx				UNITS
OUTPUT					
Rated AC Active Output Power	80000	100000	110000	120000	W
Maximum AC Apparent Output Power	80000	100000	120000	120000	VA
AC Output Line Connections	3W + PE, 4W + PE				
Supported Grids	WYE: TN-C, TN-S, TN-C-S, TT, IT; Delta: IT				
AC Output Voltage Minimum-Nominal-Maximum(1) (L-N)	244 – 277 – 305				Vac
AC Output Voltage Minimum-Nominal-Maximum(1) (L-L)	422.5 – 480 – 529				Vac
AC Frequency Min-Nom-Max(1)	59.5 – 60 – 60.5				Hz
Maximum Continuous Output Current (per Phase, PF=1)	96.5	120	144.3		Aac
GFDI Threshold	1				A
Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds	Yes				
Total Harmonic Distortion	≤ 3				%
Power Factor Range	±0.85 to 1				
INPUT					
Maximum DC Power (Module STC) Inverter / Synergy Unit	140000 / 70000	175000 / 58300	210000 / 70000		W
Transformer-less, Ungrounded	Yes				
Maximum Input Voltage DC+ to DC-	1000				Vdc
Operating Voltage Range	850 – 1000				Vdc
Maximum Input Current	2 x 48.25	3 x 40	3 x 48.25		Adc
Reverse-Polarity Protection	Yes				
Ground-Fault Isolation Detection	167kΩ sensitivity per Synergy Unit(2)				
CEC Weighted Efficiency	98.5				%
Nighttime Power Consumption	< 8	< 12			W
ADDITIONAL FEATURES					
Supported Communication Interfaces(3)	2 x RS485, Ethernet, Wi-Fi (optional), Cellular (optional)				
Smart Energy Management	Export Limitation				
Inverter Commissioning	With the SetApp mobile application using built-in Wi-Fi access point for local connection				
Arc Fault Protection	Built-in, User Configurable (According to UL1699B)				
Photovoltaic Rapid Shutdown System	NEC 2014 – 2023, built-in				
PID Rectifier	Nighttime, built-in				
RS485 Surge Protection (ports 1+2)	Type II, field replaceable, Integrated				
AC, DC Surge Protection	Type II, field replaceable, Integrated				
DC Fuses (Single Pole)	25A, Integrated				
DC SAFETY SWITCH					
DC Disconnect	Built-in				
STANDARD COMPLIANCE					
Safety	UL1699B, UL1741, UL1741 SA, UL1741 SB, UL1998, CSA C22.2#107.1, Canadian AFCI according to T.I.L. M-07				
Grid Connection Standards	IEEE 1547-2018, Rule 21, Rule 14 (HI)				
Emissions	FCC part 15 class A				

(1) For other regional settings please contact SolarEdge support.
(2) Where permitted by local regulations.
(3) For specifications of the optional communication options, visit the Communication product page or the Knowledge Center to download the relevant product datasheet.

Section 3, Item A.

SUNVEST
Developing • Renewable • Relationships
(262) 547-1200 www.sunvest.com

N27 W24025 PAUL CT. SUITE 100
PEWAUKEE, WI 53072
PHONE: (262)-547-1200
WWW.SUNVEST.COM

PROFESSIONAL ENGINEER STAMPS

ISSUANCE:

10% PRELIMINARY PLAN SET

LICENSED ELECTRICAL ENGINEER certifies that they prepared all the electrical "E" sheets in this drawing set.
LICENSED STRUCTURAL ENGINEER certifies that they prepared all of the structural "S" sheets in this drawing set.
LICENSED CIVIL ENGINEER certifies that they prepared all of the civil "C" sheets in this drawing set.
It should be noted that any plan sheets not identified above have been prepared and certified by others and have been included herein for informational purposes only.

10		21	
9		20	
8		19	
7		18	
6	05/06/26	17	
5	03/31/26	16	
4	06/17/24	15	
3	05/22/24	14	
2	05/21/24	13	
1	03/07/24	12	
0	04/12/23	11	
REV	SET/DATE	REV	SET/DATE

DRAWN BY: TG CHECKED BY: BN
SCALE: AS NOTED JOB NO: 01953

WATERTOWN HOPS

1224 AMERICAN WAY
WATERTOWN, WI 53094

SHEET TITLE

SPEC SHEETS

DWG. NO.

E-4.00

Three Phase Inverters for the 277/480V Grid

for North America

SE30KUS / SE40KUS

INVERTERS

12-20 YEAR WARRANTY

The best choice for SolarEdge enabled systems

- Specifically designed to work with power optimizers
- Quick and easy inverter commissioning directly from a smartphone using SolarEdge SetApp
- Fixed voltage inverter for superior efficiency (98.5%) and longer strings
- Built-in type 2 DC and AC Surge Protection, to better withstand lightning events
- Small, lightest in its class, and easy to install outdoors or indoors on provided bracket
- Integrated arc fault protection and rapid shutdown for NEC 2014 and 2017, per articles 690.11 and 690.12
- Built-in module level monitoring with Ethernet, wireless, or cellular communication for full system visibility
- Integrated safety switch
- UL1741 SA and SB certified, for CPUC Rule 21 grid compliance

solaredge.com

solaredge

Three Phase Inverters

For the 277/480V Grid for North America

SE10KUS / SE20KUS / SE30KUS / SE33.3KUS

INVERTERS

12-20 YEAR WARRANTY

The best choice for SolarEdge enabled systems

- Specifically designed to work with power optimizers
- Superior efficiency (98.5%)
- Integrated arc fault protection and rapid shutdown for NEC 2014 and 2017, per article 690.11 and 690.12
- UL1741 SA certified, for CPUC Rule 21 grid compliance
- Built-in module-level monitoring
- Internet connection through Ethernet or Wireless
- Small, lightweight, and easy to install outdoors or indoors on provided bracket
- Fixed voltage inverter for longer strings
- Integrated Safety Switch
- Supplied with RS485 Surge Protection Device, to better withstand lightning events

solaredge.com

solaredge

Power Optimizer

P860 / P960

POWEROPTIMIZER

25 YEAR WARRANTY

PV power optimization at the module-level

The most cost effective solution for commercial and large field installations

- Specifically designed to work with SolarEdge inverters
- High efficiency with module-level MPPT, for maximized system energy production and revenue, and fast project ROI
- Superior efficiency (99.5%)
- Balance of System cost reduction; 50% less cables, fuses and combiner boxes, over 2x longer string lengths possible
- Fast installation with a single bolt
- Advanced maintenance with module-level monitoring
- Module-level voltage shutdown for installer and firefighter safety
- Use with two PV modules connected in series or in parallel
- Meets NEC requirements for arc fault protection (AFCI) and Photovoltaic Rapid Shutdown System (PVRSS)

solaredge.com

solaredge

Power Optimizer

USA Domestic Content Eligible for North America

C651U

Power Optimizer Model	C651U	
INPUT		
Rated Input DC Power(1)	650	W
Absolute Maximum Input Voltage (Voc)	80	Vdc
MPPT Operating Range	12.5 – 80	Vdc
Maximum Short Circuit Current (Isc) of Connected PV Module(2)	20	Adc
Maximum Adjusted Short Circuit Current (with Safety Factor)(3)	25	Adc
Maximum Efficiency	99.5	%
Weighted Efficiency	98.8	%
Overvoltage Category	II	
OUTPUT DURING OPERATION		
Maximum Output Power	650	Wdc
Maximum Output Current	24	Adc
Maximum Output Voltage	60	Vdc
SAFETY FEATURES		
SafeDC™	Yes	
Safety Output Voltage per Power Optimizer	0.5 ± 0.075	Vdc
Sense Connect	Yes	
Photovoltaic Rapid Shutdown System	Yes, NEC 2014 – 2023	
STANDARD COMPLIANCE		
EMC	FCC Part 15; IEC 61000-6-2; IEC 61000-6-3	
Safety	IEC62109-1 (class II safety); UL 1741; UL 3741; CSA C22.2#107.1	
Material	UL 94 V-0, UV Resistant	
RoHS	Yes	
Fire Safety	VDE-AR-E 2100-712:2013-05	
INSTALLATION SPECIFICATIONS		
Compatible SolarEdge Inverters(6)	Commercial Three Phase Inverters with one of the following part number structures: xSE-SIN-US\xxxxxx SE-ORB -US\xxxxxx SE-TRI-US\xxxxxx	
Maximum Allowed System Voltage	1000	Vdc
Dimensions (W x L x H)	128 x 155 x 52 / 5.03 x 6.10 x 2.05	mm / in
Weight	1080 / 2.38	gr / lb
Input Connector	MC4(8)	
Input Wire Length	(+) 1.4, (-) 1.4 / (+) 4.59, (-) 4.59(9)	m / ft
Output Connector	MC4	
Output Wire Length	(+) 3.0, (-) 0.10 / (+) 9.84, (-) 0.33	m / ft
Operating Temperature Range(5)	-40 to +85 / -40 to +185	°C / °F
Protection Rating	IP68 / NEMA6P	
Relative Humidity	0 – 100	%

(1) Modules with a front side maximum power of up to 715W at STC are allowed. Up to +5% power tolerance is allowed.
(2) When using bifacial modules, consider only the front side Isc at STC. 25% back side gain). For details, see here.
(3) Adjusted for ambient temperature, irradiance, bifacial gain, safety factor, and so on, in accordance with NEC and CSA.
(4) For detailed inverter compatibility information, see here.
(5) For other connector types please contact SolarEdge.
(6) The Sense Connect feature is only enabled on the output wire connectors. For details, see here.
(7) For ambient temperatures above +65°C / +149°F, power derating is applied. For details, see here.

© SolarEdge Technologies, Ltd. All rights reserved. SOLAREDGE, the SolarEdge logo, OPTIMIZED BY SOLAREDGE are trademarks or registered trademarks of SolarEdge Technologies, Inc. All other trademarks mentioned herein are trademarks of their respective owners. Date: April 14, 2022 DS-000243-NAM. Subject to change without notice.

RoHS

Three Phase Inverters for the 277/480V Grid(1)

for North America

SE30KUS / SE40KUS

MODEL NUMBER	SE30KUS	SE40KUS	
APPLICABLE TO INVERTERS WITH PART NUMBER	SEXXX-US\XBXXXX		UNITS
OUTPUT			
Rated AC Power Output	30000	40000	W
Maximum Apparent AC Output Power	30000	40000	VA
AC Output Line Connections	3W + PE, 4W + PE		
AC Output Voltage Minimum-Nominal-Maximum(2) (L-N)	244 – 277 – 305		Vac
AC Output Voltage Minimum-Nominal-Maximum(2) (L-L)	422.5 – 480 – 529		Vac
AC Frequency Min-Nom-Max(2)	59.3 – 60 – 60.5		Hz
Maximum Continuous Output Current (per Phase)	36.25	48.25	Aac
GFDI Threshold	1		A
Utility Monitoring, Islanding Protection, Country Configurable Set Points	Yes		
Total Harmonic Distortion	< 3		%
Power Factor Range	+/- 0.85 to 1		
INPUT			
Maximum DC Power (Module STC)	52500	70000	W
Transformer-less, Ungrounded	Yes		
Maximum Input Voltage DC+ to DC-	1000		Vdc
Operating Voltage Range	840 – 1000		Vdc
Maximum Input Current	36.25	48.25	Adc
Maximum Input Short Circuit Current	55		Adc
Reverse-Polarity Protection	Yes		
Ground-Fault Isolation Detection	167kΩ Sensitivity(3)		
CEC Weighted Efficiency	98.5		%
Night-time Power Consumption	<4		W
ADDITIONAL FEATURES			
Supported Communication Interfaces	2 x RS485, Ethernet, Cellular (optional)		
Inverter Commissioning	With the SetApp mobile application using built-in access point for local connection		
Arc Fault Protection	Integrated, User Configurable (According to UL1699B)		
Rapid Shutdown	NEC2014, NEC2017 and NEC2020 compliant/certified		
RS485 Surge Protection Plug-in	Supplied with the Inverter, Built-in		
DC Surge Protection	Type II, field replaceable, Built-in		
AC Surge Protection	Type II, field replaceable, Built-in		
DC Fuses (Single Pole)	25A, Built-in		
Smart Energy Management	Export Limitation		
DC SAFETY SWITCH			
DC Disconnect	Integrated		
STANDARD COMPLIANCE			
Safety	UL1741, UL1741 SA, UL1741 SB, UL1699B, CSA C22.2, Canadian AFCI according to T.I.L. M-07		
Grid Connection Standards	IEEE1547-2018, Rule 21, Rule 14 (HI)		
Emissions	FCC Part 15 class A		
INSTALLATION SPECIFICATIONS			
AC Output Conduit Size / AWG Range	¾" or 1" / 6 – 10 AWG		
DC Input Conduit Size / AWG Range	¾" or 1" / 6 – 12 AWG		
Number of DC Inputs Pairs	4		
Dimensions with Safety Switch (H x W x D)	31.8 x 12.5 x 11.8 / 808 x 317 x 300		in / mm
Weight with Safety Switch	78.2 / 35.5		lb / kg
Cooling	Fans (user replaceable)		
Noise	< 62		dBA
Operating Temperature Range	-40 to +140 / -40 to +60(4)		°F / °C
Protection Rating	NEMA 3R		
Mounting	Bracket provided		

(1) For 120/208V inverters refer to the Three Phase Inverters for the 120/208V Grid for North America datasheet.
(2) For other regional settings please contact SolarEdge support.
(3) Where permitted by local regulations.
(4) For power de-rating information refer to the Temperature De-rating - Technical Note (North America).

© SolarEdge Technologies, Ltd. All rights reserved. SOLAREDGE, the SolarEdge logo, OPTIMIZED BY SOLAREDGE are trademarks or registered trademarks of SolarEdge Technologies, Inc. All other trademarks mentioned herein are trademarks of their respective owners.

CE

Three Phase Inverters

For the 277/480V Grid(1) for North America

SE10KUS / SE20KUS / SE30KUS / SE33.3KUS

	SE10KUS	SE20KUS	SE30KUS	SE33.3KUS	
OUTPUT					
Rated AC Power Output	10000	20000	30000	33300	VA
Maximum AC Power Output	10000	20000	30000	33300	VA
AC Output Line Connections	4-wire WYE (L1-L2-L3-N) plus PE				
AC Output Voltage Minimum-Nominal-Maximum(2) (L-N)	244-277-305				Vac
AC Output Voltage Minimum-Nominal-Maximum(2) (L-L)	422.5-480-529				Vac
AC Frequency Min-Nom-Max(2)	59.3 - 60 - 60.5				Hz
Max. Continuous Output Current (per Phase)	12	24	36.5	40	A
GFDI Threshold	1				A
Utility Monitoring, Islanding Protection, Country Configurable Set Points	Yes				
INPUT					
Maximum DC Power (Module STC)	13500	27000	40500	45000	W
Transformer-less, Ungrounded	Yes				
Maximum Input Voltage DC to Gnd	490				Vdc
Maximum Input Voltage DC+ to DC-	980				Vdc
Nominal Input Voltage DC to Gnd	420				Vdc
Nominal Input Voltage DC+ to DC-	840				Vdc
Maximum Input Current	13.5	26.5	39	40	Adc
Maximum Input Short Circuit Current	45				Adc
Reverse-Polarity Protection	Yes				
Ground-Fault Isolation Detection	1MΩ Sensitivity		350kΩ Sensitivity(3)		
CEC Weighted Efficiency	98		98.5		%
Night-time Power Consumption	< 3		< 4		W
ADDITIONAL FEATURES					
Supported Communication Interfaces	RS485, Ethernet, ZigBee (optional)				
Rapid Shutdown – NEC 2014 and 2017 690.12	Automatic Rapid Shutdown upon AC Grid Disconnect				
RS485 Surge Protection	Supplied with the inverter				
STANDARD COMPLIANCE					
Safety	UL1741, UL1741 SA, UL1699B, CSA C22.2, Canadian AFCI according to T.I.L. M-07				
Grid Connection Standards	IEEE1547, Rule 21, Rule 14 (HI)				
Emissions	FCC part15 class B				
INSTALLATION SPECIFICATIONS					
AC output conduit size / AWG range	3/4" minimum / 12-6 AWG		3/4" minimum / 8-4 AWG		
DC input conduit size / AWG range	3/4" minimum / 12-6 AWG				
Number of DC inputs	2 pairs		3 pairs(8)		
Dimensions (H x W x D)	21 x 12.5 x 10.5 / 540 x 315 x 260				in / mm
Dimensions with Safety Switch (H x W x D)	30.5 x 12.5 x 10.5 / 775 x 315 x 260				in / mm
Weight	73.2 / 33.2		99.5 / 45		lb / kg
Weight with Safety Switch	79.7 / 36.2		106 / 48		lb / kg
Cooling	Fans (user replaceable)				
Noise	< 50		< 55		dBA
Operating Temperature Range	-40 to +140 / -40 to +60(9)				°F / °C
Protection Rating	NEMA 3R				

(1) For 208V inverters refer to: http://www.solaredge.com/files/pdf/products/inverters/se-three-phase-up-inverter-208v-datasheet.pdf
(2) For other regional settings please contact SolarEdge support
(3) Where permitted by local regulations
(4) Field replacement kit for 1 pair of inputs P/N: DCD-3PH-1TBKI; Field replacement kit for 3 pairs of fuses and holders P/N: DCD-3PH-6FHK-S1
(5) For power de-rating information refer to: https://www.solaredge.com/sites/default/files/se-temperature-derating-note-na.pdf

© SolarEdge Technologies, Inc. All rights reserved. SOLAREDGE, the SolarEdge logo, OPTIMIZED BY SOLAREDGE are trademarks or registered trademarks of SolarEdge Technologies, Inc. All other trademarks mentioned herein are trademarks of their respective owners. Date: 12/2018/V01/INT NAM. Subject to change without notice.

CE RoHS

Power Optimizer

P860 / P960

Power Optimizer Model (Typical Module Compatibility)	P860 (for 2 x 72 cell modules)	P960 (for 2 x 72 cell modules)	Unit
INPUT			
Rated Input DC Power(1)	860	960	W
Connection type	Dual input for independently connected modules(2)		
Absolute Maximum Input Voltage (Voc at lowest temperature)	60		Vdc
MPPT Operating Range	12.5 - 60		Vdc
Maximum Short Circuit Current (Isc)	22	23	Adc
Maximum Short Circuit Current per input (Isc)	11	11.5	Adc
Maximum Efficiency	99.5		%
Weighted Efficiency	98.6		%
Overvoltage Category	II		
OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING INVERTER)			
Maximum Output Current	18		Adc
Maximum Output Voltage	80		Vdc
OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM INVERTER OR INVERTER OFF)			
Safety Output Voltage per Power Optimizer	1 ±0.1		Vdc
STANDARD COMPLIANCE			
Photovoltaic Rapid Shutdown System	Compliant with NEC 2014, 2017(3), 2020		
EMC	FCC Part15 Class A, IEC61000-6-2, IEC61000-6-3		
Safety	IEC62109-1 (class II safety), UL1741		
Material	UL-94 V-0, UV Resistant		
RoHS	Yes		
INSTALLATION SPECIFICATIONS			
Compatible SolarEdge Inverters	Three phase inverters		
Maximum Allowed System Voltage	1000		Vdc
Dimensions (W x L x H)	129 x 168 x 59 / 5.1 x 6.61 x 2.32		mm / in
Weight (including cables)	1064 / 2.34		gr / lb
Input Connector	MC4(4)		
Output Wire Length(5) — Lengths options (1)	Input #1: (-) 0.16 / 0.52, (+) 0.16 / 0.52	Input #2: (-) 0.16 / 0.52, (+) 0.16 / 0.52	m / ft
Output Wire Length(5) — Lengths options (2)	(-) 1.6 / 5.24, (+) 0.16 / 0.52	(-) 0.16 / 0.52, (+) 1.6 / 5.24	m / ft
Output Wire Type / Connector	Double Insulated; MC4		
Output Wire Length	2.3 / 7.2		
Operating Temperature Range(6)	-40 to +85 / -40 to +185		°C / °F
Protection Rating	IP68 / NEMA6P		
Relative Humidity	0 - 100		%

(1) Rated power of the module at STC will not exceed the optimizer Rated Input DC Power Modules with up to +5% power tolerance are allowed.
(2) In a case of odd number of PV modules in one string, it is allowed to install one P860/P960 power optimizer connected to one PV module. When connecting a single module to P860/P960, seal the unused input connectors with the supplied pair of seals.
(3) NEC 2017 requires max combined input voltage be not more than 80V
(4) For other connector types please refer to: https://www.solaredge.com/sites/default/files/optimizer-input-connector-compatibility.pdf
(5) Longer inputs wire length are available for use with split junction box modules. For options 2, order P860-xxw/fxxx.
(6) For ambient temperature above +70°C / +158°F power de-rating is applied. Refer to Power Optimizers Temperature De-Rating Application Note for more details.

PV SYSTEM DESIGN USING SOLAREDGE INVERTER(1)		THREE PHASE FOR 230/400V GRID	THREE PHASE FOR 277/480V GRID	
		P860/P960		
Minimum String Length	Power Optimizers	14		
	PV Modules	27		
Maximum String Length	Power Optimizers	30		
	PV Modules	60		
Maximum Power per String		13500(2)	15300(3)	W
Parallel Strings of Different Lengths or Orientations		Yes		

(1) It is allowed to mix P860/P960 with P730/P800/P850/P950/P1000 in one string or to mix with P370/ P505 in one string.
(2) For the 230/400V grid: up to 15,750W per string may be installed when the maximum power difference between each string is 2,000W.
(3) For the 277/480V grid: up to 15,750W per string may be installed when the maximum power difference between each string is 2,000W.

© SolarEdge Technologies Ltd. All rights reserved. SOLAREDGE, the SolarEdge logo, OPTIMIZED BY SOLAREDGE are trademarks or registered trademarks of SolarEdge Technologies, Ltd. All other trademarks mentioned herein are trademarks of their respective owners. Date: 11/2020/V02/INT ROW. Subject to change without notice.

CE RoHS

Power Optimizer

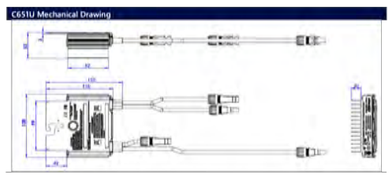
USA Domestic Content Eligible for North America

C651U

PV System Design Using a SolarEdge Inverter(1)		208V Grid SE10K	208V Grid SE17.3K*	277/480V Grid SE30K, SE33.3K*	277/480V Grid SE40K*	
Compatible Power Optimizers		C651U				
Minimum String Length	Power Optimizers	13	13	18	18	
	PV Modules	13	13	18	18	
Maximum String Length	Power Optimizers	57	57	57	57	
	PV Modules	57	57	57	57	
Maximum Continuous Power per String		10,000	9600	20,400	20,400	W
Maximum Allowed Connected Power per String(2)		1 string or more – 15,000	1 string – 11,400; 2 strings or more – 15,600	1 string – 22,650; 2 strings or more – 30,400	1 string – 22,650; 2 strings or more – 30,400	W
Parallel Strings of Different Lengths or Orientations		Yes				
Maximum Difference in Number of Power Optimizers Allowed Between the Shortest and Longest String Connected to the Same Inverter Unit		5 Power Optimizers				

*The same rules apply for Synergy units of equivalent power ratings, that are part of the modular Synergy technology inverter.
(1) C651U cannot be mixed with any other Power Optimizer models in the same string.
(2) To connect more STC power per string, design your project using SolarEdge Designer.

C651U Mechanical Drawing



Eligibility for Domestic Content

As it relates to the domestic content rules, the U.S. Department of Treasury and the IRS have not yet issued proposed or final regulations. Rather, the IRS has issued three notices - Notice 2023-38, Notice 2024-41 and Notice 2025-08. These notices provide guidance regarding the domestic content rules. SolarEdge products referenced herein are manufactured with the intent to be eligible for inclusion under the elective safe harbor table in calculating the Domestic Cost Percentage under the **"Rooftop (MLPE)"** category (under IRS **Notices 2024-41 and 2025-08, depending on the PN used – see chart below**). Eligibility is subject to the installation of qualified USA-Manufactured Inverters and Power Optimizers (C651U) in the same project. SolarEdge does not provide tax and/or legal advice. You should consult with your own legal and/or tax advisor(s) regarding the eligibility of your project for the ITC or PTC, including the 10% Domestic Content bonus, to determine how the applicable rules apply to your project. The forward-looking statements in this document are accurate as of the date herein and are subject to changes. For more information, please contact your local SolarEdge sales representative.

PN	Domestically produced MPCs per notice 2024-41*	Domestically produced MPCs per notice 2025-08*
USE-SIN-US\R0BINS6, when paired with C651U	Printed Circuit Board Assemblies, Electrical Parts, Enclosure (35.6%)	Printed Circuit Board Assemblies (DC-DC) and (AC-AC), Enclosure, Production (24.8%)
USE\SUK-US\R0INN6, when paired with C651U	Printed Circuit Board Assemblies, Electrical Parts, Enclosure (35.6%)	Printed Circuit Board Assemblies (DC-DC) and (AC-AC), Enclosure, Production (24.8%)
USE-SIN-US\R0BINS8, when paired with C651U	Printed Circuit Board Assemblies, Electrical Parts, Enclosure (17.6%)	Printed Circuit Board Assemblies (DC-DC) and (AC-AC), Enclosure, Production (24.8%)
USE\SUK-US\R0INN8, when paired with C651U	Printed Circuit Board Assemblies, Electrical Parts, Enclosure (17.6%)	Printed Circuit Board Assemblies (DC-DC) and (AC-AC), Enclosure, Production (24.8%)

© SolarEdge Technologies, Ltd. All rights reserved. SOLAREDGE, the SolarEdge logo, OPTIMIZED BY SOLAREDGE are trademarks or registered trademarks of SolarEdge Technologies, Inc. All other trademarks mentioned herein are trademarks of their respective owners. Date: April 14, 2022 DS-000243-NAM. Subject to change without notice.

RoHS

SUNVEST
Developing • Renewable • Relationships
(262) 547-1200 www.sunvest.com

N27 W24025 PAUL CT. SUITE 100
PEWAUKEE, WI 53072
PHONE: (262)-547-1200
WWW.SUNVEST.COM

Section 3, Item A.

PROFESSIONAL ENGINEER STAMPS

ISSUANCE:

10% PRELIMINARY PLAN SET

LICENSED ELECTRICAL ENGINEER certifies that they prepared all the electrical "E" sheets in this drawing set.
LICENSED STRUCTURAL ENGINEER certifies that they prepared all of the structural "S" sheets in this drawing set.
LICENSED CIVIL ENGINEER certifies that they prepared all of the civil "C" sheets in this drawing set.
It should be noted that any plan sheets not identified above have been prepared and certified by others and have been included herein for informational purposes only.

10		21	
9		20	
8		19	
7		18	
6	05/06/26	17	
5	03/31/26	16	
4	06/17/24	15	
3	05/22/24	14	
2	05/21/24	13	
1	03/07/24	12	
0	04/12/23	11	
REV	SET/DATE	REV	SET/DATE

DRAWN BY: TG | CHECKED BY: BN

SCALE: AS NOTED | JOB NO: 01953

WATERTOWN HOPS

1224 AMERICAN WAY
WATERTOWN, WI 53094

SHEET TITLE

SPEC SHEETS

DWG. NO.

E-4.01

Site Plan Review Committee -

Thank you for adding to your agenda the topic of possible redevelopment of 245 S. Concord (parcel 291-0815-0331-047).

Background:

I am considering an adaptive redevelopment of the building located at 245 S. Concord in Watertown (parcel 291-0815-0331-047). My plan would be a multi-phased approach, currently to include the following steps, ultimately resulting in either a single private residence, or possibly a combination of private residence with additional condos for lease:

1. Invest in securing the property site to minimize the potential of injury to individuals entering the grounds.

2. Work with an architect and engineer to draft plans for the property redevelopment for submission to the Committee for approval.

3. Construct a building on the property with 2 to 4 garage spaces and a single apartment. This building will serve as a location for me to stay in when onsite for future construction activities, as well as secure storage for future construction materials.

4. Begin construction on the existing structure.

5. At this time there is no ETA for completion of the project, given the above variables.

As reference materials for this meeting request, I am providing the following:

1. A copy of blueprints that were commissioned by the current owner in 2001 - 2005. These blueprints depict the redevelopment of the property into a 10-unit condo building. These blueprints are being provided only for reference and do not depict how I plan to develop the building.

2. A photo of conditional approval granted to the current owner, from the Wisconsin Department of Commerce, dated May 2007, based on the 2001 blueprints, as evidence of some level of prior approval for a residential project.

3. Photos taken on June 10, 2026 of the property.

Questions for the Site Plan Review Committee:

1. Please confirm that the property located at 245 S. Concord Ave. (parcel 291-0815-0331-047) is currently zoned for multi-family residential use.

2. Does the Committee foresee any issues with my plan to redevelop the existing structure into either a single private residence, or a private residence with a small number of additional units for lease or sale?

3. If there are any issues with my proposed plan, could the Committee provide a list, along with suggested remediation steps?

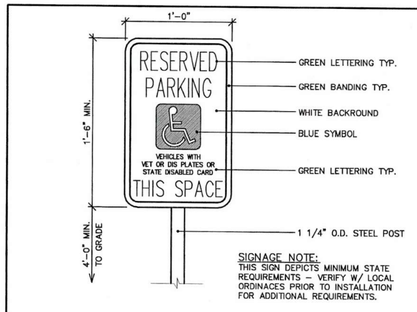
As an FYI, I am currently in contact with the Wisconsin DNR to 1) confirm that the building is not part of the regulated dam facility adjacent to the building, 2) determine whether Chapter 31 applies to the site, or 3) whether any Chapter 30 approvals would be required. I am also working with my insurance agent based on Oconomowoc to verify that FEMA flood insurance would be available for this parcel, based on the zone AE designation.

At this time, I intend to attend the July 13th, 2026 meeting and will be happy to make myself available for questions as appropriate.

Thank you for your consideration.

Doug Herman

917-846-0695
douglas.herman@gmail.com



SIGNAGE NOTE:
THIS SIGN DEPICTS MINIMUM STATE REQUIREMENTS – VERIFY W/ LOCAL ORDINACES PRIOR TO INSTALLATION FOR ADDITIONAL REQUIREMENTS.

1 / SP1 H.C. PARKING SIGN DETAIL
SCALE: 1-1/2" = 1'
PII-D:\2001\POWER PLANT\PP-DTL01.DWG
DECEMBER 28, 2001

POWER PLANT APARTMENTS

S. Concord Avenue
Watertown, WI

DRAWING INDEX:

SP-1 SITE PLAN, TYPICAL CONSTRUCTS SITE DETAILS
A-1 BASEMENT FLOOR PLAN
A-2 FIRST FLOOR PLAN
A-3 SECOND FLOOR PLAN
A-4 THIRD FLOOR PLAN
A-5 FOURTH FLOOR PLAN
A-6 FIFTH FLOOR PLAN
A-7 SIXTH FLOOR PLAN
A-8 SEVENTH FLOOR PLAN

DRAWING INDEX:

A-9 STAIR TOWER SECTION, BUILDING SECTION
A-10 ELEVATOR SHAFT SECTION, BUILDING SECTION
A-11 ELEVATIONS, RAILING DETAILS THRESHOLD DETAIL
A-12 ELEVATIONS
A-13 H.C. BATH DETAILS, BATHROOM BLOCKING DETAILS, STAIR SECTIONS, HANDRAIL DETAILS
A-14 FIRE-PROOFING DETAILS, FOUNDATION PINNING DETAIL

PROJECT DESCRIPTION:

CONVERTING AN EXISTING POWER PLANT BUILDING INTO A MULTI-FAMILY APARTMENT BUILDING – PROJECT TO INCLUDE THE FOLLOWING:
- BASEMENT UNDERGROUND PARKING AREA
- STAIR TOWER AND ELEVATOR SHAFT ADDITIONS
- ENTRY VESTIBULE ADDITION
- NEW STEEL FRAMED FLOOR LEVELS – SEE SECTIONS
- PENTHOUSE (4TH FLOOR) ADDITION W/ ROOF DECKS
- TEN 2-BEDROOM APARTMENTS (SEE PLAN)

BUILDING INFORMATION:

CONSTRUCTION TYPE:	TYPE ~~1A~~ 1B
BUILDING AREA:	16,974 S.F.
NO. OF FLOORS:	8
NO. OF STORIES:	7
BUILDING HEIGHT:	EXCEEDS 60'
SPRINKLERED:	YES

5 / SP1 TITLE BLOCK
PII-D:\2001\POWER PLANT\PP-TITLE.DWG
DECEMBER 28, 2001

TYPICAL CONSTRUCTS

TYPICAL SLAB-ON-GRADE CONCRETE FLOOR:
- 6" COMPACTED SAND BASE
- 6 MIL POLY VAPOR BARRIER WITH SEAMS OVERLAPPED 24" MINIMUM
- 4" FIBRE-MESH 3,000 P.S.I. CONCRETE – 5"-6" SLUMP
- 4" SLAB THICKNESS
- SMOOTH FINISH SEALED

TYPICAL 2-HOUR FLOOR SYSTEM:
- STEEL FRAMING W/ STEEL DECK – ENGINEERED BY OTHERS
- 2" LIGHTWEIGHT CONCRETE TOPPING

TYPICAL 1-HOUR FLOOR SYSTEM:
- STEEL FRAMING W/ STEEL DECK – ENGINEERED BY OTHERS
- 2" LIGHTWEIGHT CONCRETE TOPPING

TYPICAL EXISTING ROOF SYSTEM:
- EXISTING CONCRETE ROOF DECK
- R-22 MIN. FOAM INSULATION
- BALLASTED MEMBRANE ROOF

TYPICAL EXTERIOR WALL:
- EXISTING 3-WYTHE BRICK WALL
- 3 5/8" STEEL STUDS AT 16" O.C. (FURRING)
- 3 1/2" FIBERGLASS BATT INSULATION (R-13)
- 3 MIL POLY VAPOR BARRIER
- 1/2" G.W.B.

TYPICAL 1-HR FIRE PARTITION WALL:
- SEE DETAIL 9/A14

TYPICAL 1-HOUR FIRE BARRIER:
- SEE DETAIL 4/A14

TYPICAL PARTITION WALL
- 3 5/8" STEEL STUDS AT 16" O.C. TYP.
- 5/8" DRYWALL EACH SIDE

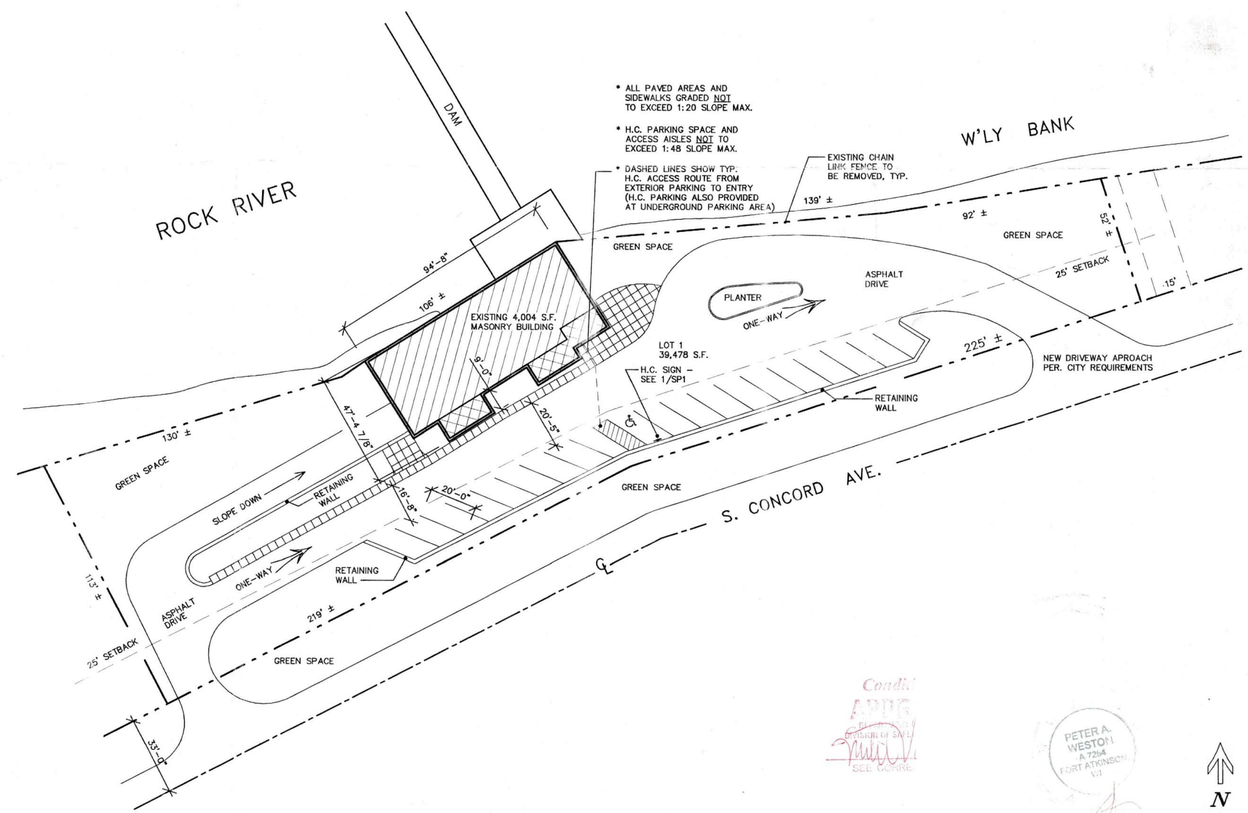
TYPICAL ROOF SYSTEM AT STAIR / ENTRY ADDITION
- BALLASTED MEMBRANE ROOF
- R-22 MIN. FOAM INSULATION
- STEEL ROOF DECK
- STEEL BAR JOISTS -- PAINTED
  * ROOF FRAMING DRAWINGS AND ENGINEERING CALCULATIONS TO BE SUBMITTED AS SHOP DRAWINGS BY STEEL COMPONENT MANUFACTURER FOR COMM. COMPONENT SYSTEM APPROVAL

TYPICAL POURED-PAN STEEL / CONCRETE STAIR SYSTEM
- STEEL "POURED-PAN" STAIRS & LANDINGS 7" MAX. RISER – 11" MIN. TREAD AT STAIR TOWERS 7 3/4" MAX. RISER – 10" MIN. TREAD AT UNIT STAIRS
- 42" GUARD RAILS W/4" O.C. MAX. SPINDLES
- 1-1/2" DIA. HANDRAILS AT 36" ABOVE STAIR
- NOSINGS & LANDINGS -- HANDRAILS CONTINUOUS AT LANDINGS AND TO INCLUDE 12" EXTENSIONS AS PER ADA REQUIREMNTS
  * DRAWINGS AND ENGINEERING CALCS TO BE SUBMITTED AS SHOP DRAWINGS BY STEEL COMPONENT MANUFACTURER FOR COMM. COMPONENT SYSTEM SUBMITTAL

TYPICAL EXTERIOR WALL AT STAIR TOWER / ENTRY ADDITION
- 12" "LIGHTWEIGHT" CMU BLOCK -- SMOOTH FACE, GLAZED INJECTED FOAM INSULATION -- R-6.0 SYSTEM VALUE MIN. -- SPECIFICATIONS TO BE SUBMITTED TO ARCHITECT FOR APPROVAL PRIOR TO CONSTRUCTION
- BOND-BEAMS W/2) #4 REBAR AT ROOF LEVEL, AND AT EACH LANDING LEVEL -- GROUT FILLED PAINTED INTERIOR FINISH
- #5 REBAR VERTICAL AT 6'-0" O.C.

TYPICAL FROST WALL AT STAIR TOWER / ENTRY ADDITION
- 12" POURED CONCRETE FROST WALL "REVERSE LEDGE" -- 3" W/1" R-5 FOAM THERMAL BREAK 2" R-10 FOAM INSULATION AT INTERIOR SIDE
- 2) #5 REBAR T&B
- FOOTING TO BE PINNED W/12", #4 PINS AT 12" O.C. TO FROST WALL
- FOOTINGS TO BE 12" X 24" AT STAIR TOWERS / 8" X 16" AT ENTRY ADDITION -- NO REBAR REQUIRED

17 / SP1 TYPICAL CONSTRUCTS
PII-D:\2001\POWER PLANT\PP-TYPCON.DWG
DECEMBER 28, 2001



20 / SP1 SITE PLAN
SCALE: 1" = 30'
2003\LENIUS POWER PLANT\LP-STE.DWG
MAY 22, 2003

the Design Alliance Architects, Inc.
1003 Madison Avenue
Fort Atkinson, WI
(920
FAX (920

POWER PLANT APARTMENTS
S. Concord Avenue
Watertown, WI

SHEET TITLE

SITE PLAN
SITE DETAILS
TYP. CONSTRUCTS

REVISIONS

PROJECT DATA

DATE: 4/13/2005

JOB NO.

DRAWN BY: CL

CHECKED BY:

SHEET NO.

SP-1

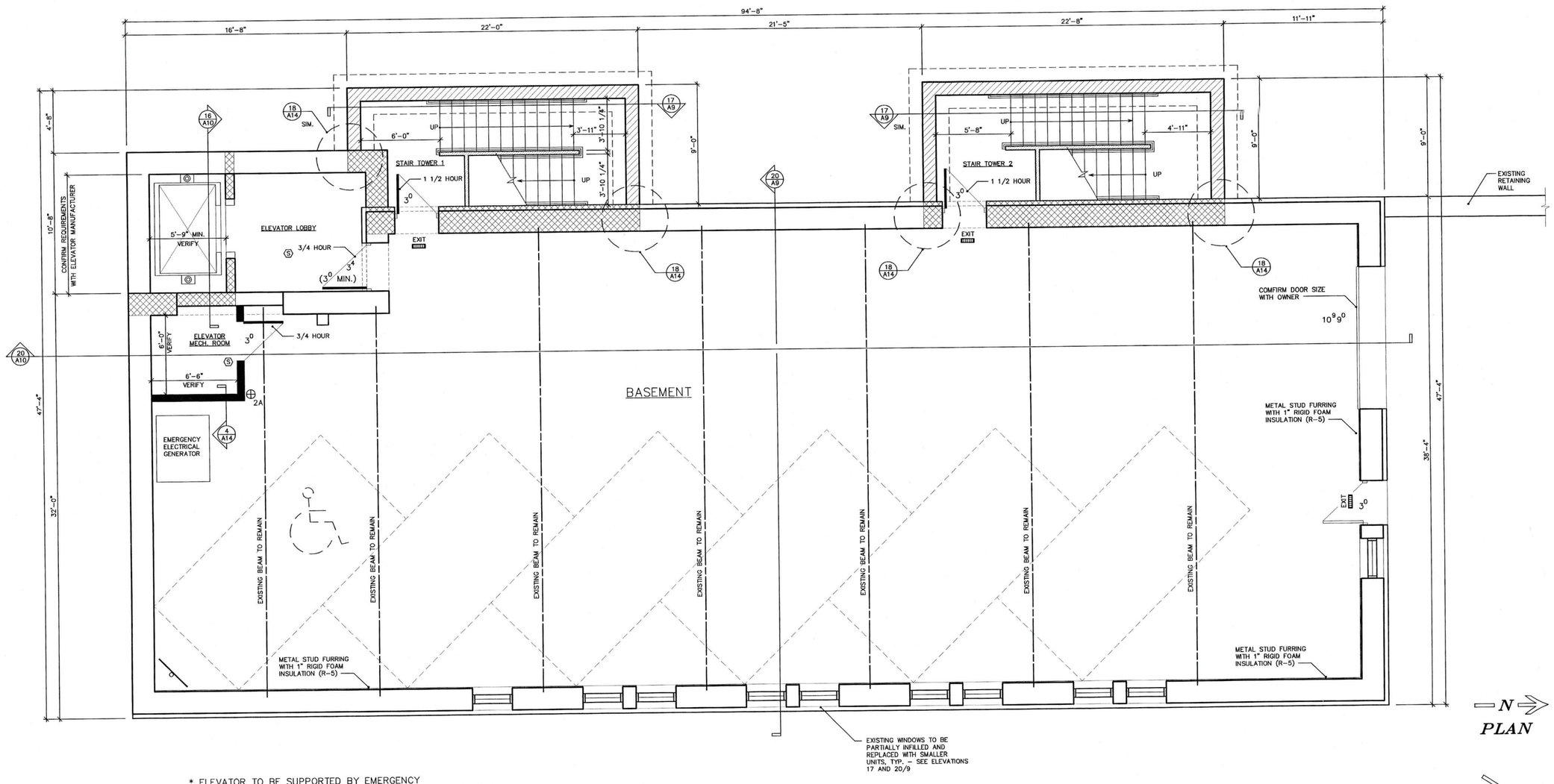
GENERAL NOTES:

* PROVIDE FIRE ALARM SYSTEM PER IBC 907.2.9
* AUTOMATIC SPRINKLER SYSTEM PER IBC 903 REQUIREMENTS
* PROVIDE SMOKE DETECTORS PER IBC 907.2.10 REQUIREMENTS
* ALL DOORS TO RECEIVE LEVER TYPE DOOR HANDLES
* FIRE DOORS -- ALL NOTED RATINGS ARE FOR ENTIRE DOOR, FRAME, AND CLOSURE ASSEMBLIES.

LEGEND:

NEW FIRE-RATED DOOR (SEE PLAN FOR FOR RATING)
EXISTING DOOR TO REMAIN
NEW STUD WALL 3 5/8" STEEL STUDS TYP. - UNLESS NOTED OTHERWISE
2-HR FIRE WALL
EXISTING MASONRY WALL (SIZE VARIES -- 24" MAX., 12" MIN.)
SMOKE DETECTOR HARD-WIRED PER IBC 907.2.10
FIRE EXTINGUISHER (2A RATED)
NEW DOOR
EXISTING DOOR TO BE REMOVED
NEW MASONRY WALL
1-HR FIRE WALL - SEE DETAILS 4/A14 AND 9/A14
EXISTING WALLS/ITEMS TO BE REMOVED
EXIT APPROVED, ILLUMINATED EXIT SIGN TYP.

5 A1 LEGEND
SCALE: 1/4" = 1'
2003\LENIUS POWER PLANT\LP-PLN.DWG
SEPTEMBER 16, 2003



* ELEVATOR TO BE SUPPORTED BY EMERGENCY BACK-UP ELECTRICAL POWER PER IBC ____ REQUIREMENTS

20 A1 BASEMENT FLOOR PLAN
SCALE: 1/4" = 1'
2003\LENIUS POWER PLANT\LP-PLN.DWG
SEPTEMBER 16, 2003

the Design Alliance Architects, Inc
1003 Madison Avenue
Fort Atkinson, WI
(920) 563-3404
FAX (920) 568-7058

POWER PLANT APARTMENTS
S. Concord Avenue
Watertown, WI

SHEET TITLE
BASEMENT FLOOR PLAN

REVISIONS

PROJECT DATA
DATE: 4/13/2005
JOB NO.
DRAWN BY: CL
CHECKED BY:
SHEET NO.
A-1

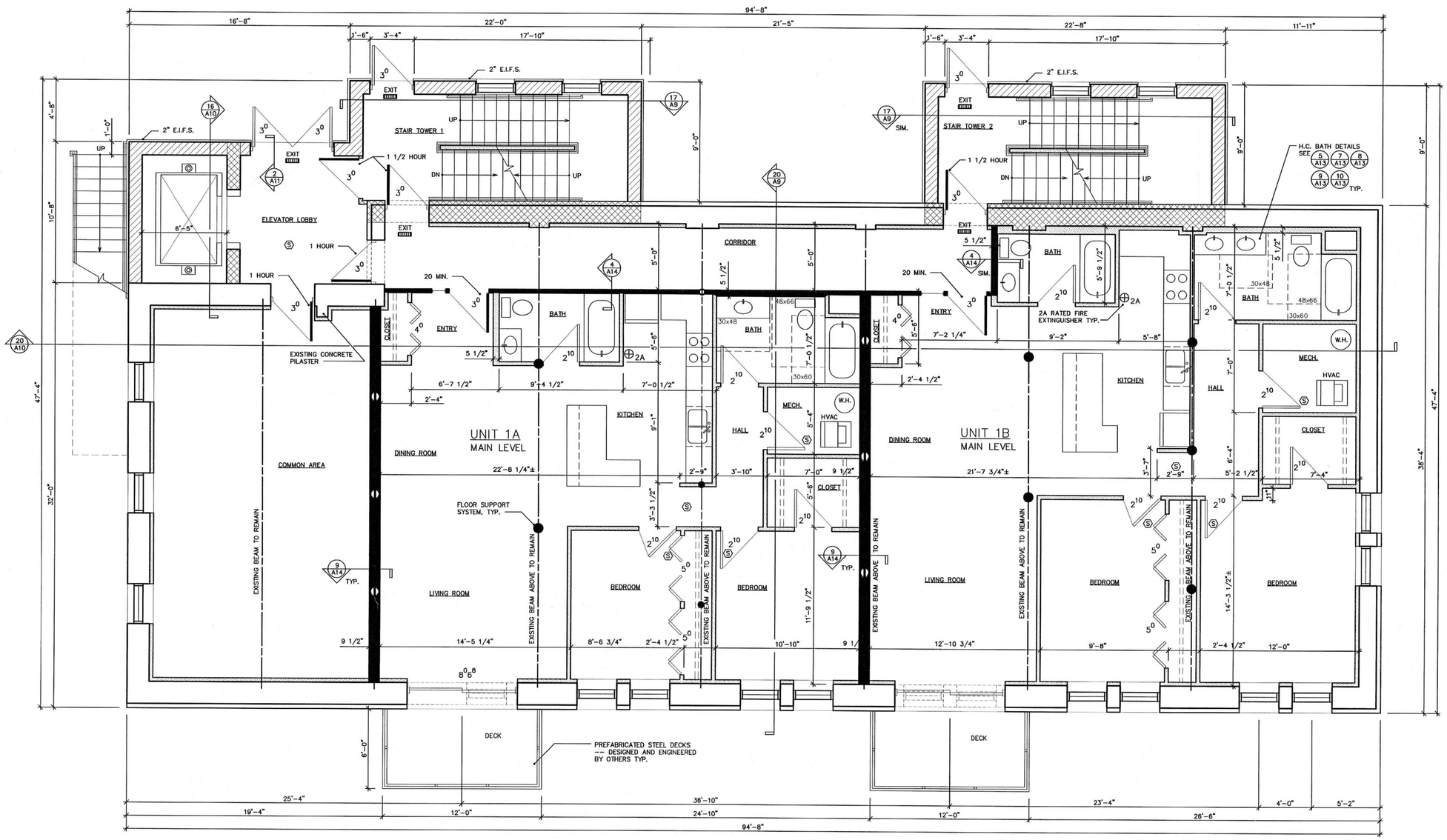
GENERAL NOTES:

* PROVIDE FIRE ALARM SYSTEM PER IBC 907.2.9
* AUTOMATIC SPRINKLER SYSTEM PER IBC 903 REQUIREMENTS
* PROVIDE SMOKE DETECTORS PER IBC 907.2.10 REQUIREMENTS
* ALL DOORS TO RECEIVE LEVER TYPE DOOR HANDLES
* FIRE DOORS -- ALL NOTED RATINGS ARE FOR ENTIRE DOOR, FRAME, AND CLOSURE ASSEMBLIES.

LEGEND:

- NEW FIRE-RATED DOOR (SEE PLAN FOR FOR RATING)
- EXISTING DOOR TO REMAIN
- NEW STUD WALL 3 5/8" STEEL STUDS TYP. - UNLESS NOTED OTHERWISE
- 2-HR FIRE WALL
- EXISTING MASONRY WALL (SIZE VARIES -- 24" MAX., 12" MIN.)
- SMOKE DETECTOR HARD-WIRED PER IBC 907.2.10
- 2A FIRE EXTINGUISHER (2A RATED)
- NEW DOOR
- EXISTING DOOR TO BE REMOVED
- NEW MASONRY WALL
- 1-HR FIRE WALL - SEE DETAILS 4/A14 AND 9/A14
- EXISTING WALLS/ITEMS TO BE REMOVED
- EXIT APPROVED, ILLUMINATED EXIT SIGN TYP.

5/A2 LEGEND
SCALE: 1/4" = 1'
2003\LENIUS POWER PLANT\LP-PLN.DWG
SEPTEMBER 16, 2003



20/A2 FIRST FLOOR PLAN
SCALE: 1/4" = 1'
2003\LENIUS POWER PLANT\LP-PLN.DWG
SEPTEMBER 16, 2003

Design Alliance Architects, Inc.
1003 Madison Avenue
Fort Atkinson, WI
(920) 563-3404
FAX (920) 568-7058

POWER PLANT APARTMENTS
S. Concord Avenue
Watertown, WI

SHEET TITLE
FIRST FLOOR PLAN

REVISIONS

PROJECT DATA
DATE: 4/13/2005
JOB NO.
DRAWN BY: CL
CHECKED BY:
SHEET NO.
A-2

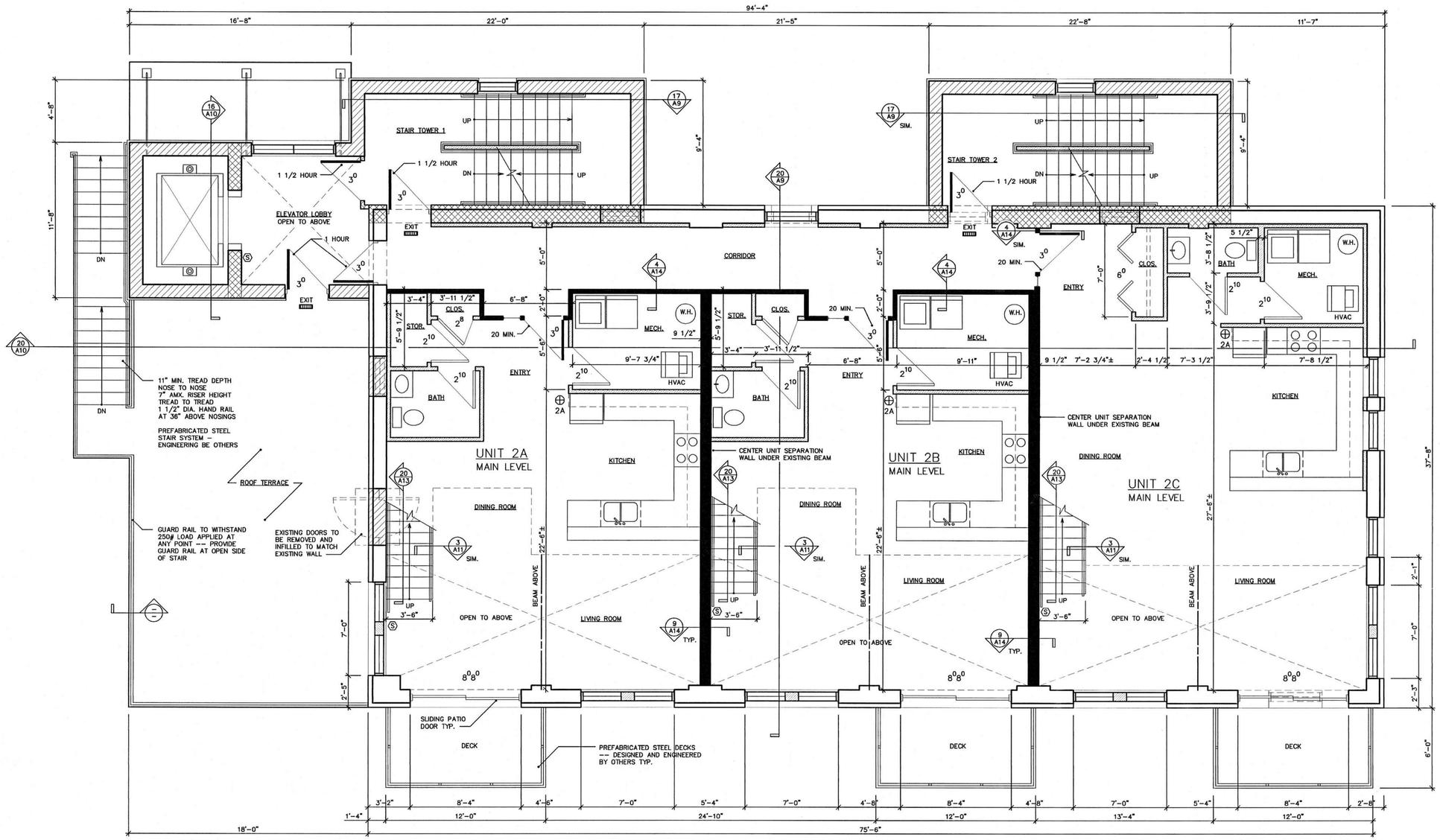
GENERAL NOTES:

* PROVIDE FIRE ALARM SYSTEM PER IBC 907.2.9
* AUTOMATIC SPRINKLER SYSTEM PER IBC 903 REQUIREMENTS
* PROVIDE SMOKE DETECTORS PER IBC 907.2.10 REQUIREMENTS
* ALL DOORS TO RECEIVE LEVER TYPE DOOR HANDLES
* FIRE DOORS -- ALL NOTED RATINGS ARE FOR ENTIRE DOOR, FRAME, AND CLOSURE ASSEMBLIES.

LEGEND:

NEW FIRE-RATED DOOR (SEE PLAN FOR FOR RATING)
EXISTING DOOR TO REMAIN
NEW DOOR
EXISTING DOOR TO BE REMOVED
NEW STUD WALL 3 5/8" STEEL STUDS TYP. - UNLESS NOTED OTHERWISE
NEW MASONRY WALL
2-HR FIRE WALL
1-HR FIRE WALL - SEE DETAILS 4/A14 AND 9/A14
EXISTING MASONRY WALL (SIZE VARIES -- 24" MAX., 12" MIN.)
EXISTING WALLS/ITEMS TO BE REMOVED
SMOKE DETECTOR HARD-WIRED PER IBC 907.2.10
2A FIRE EXTINGUISHER (2A RATED)
EXIT APPROVED, ILLUMINATED EXIT SIGN TYP.

5 A3 LEGEND
SCALE: 1/4" = 1'
2003\LENIUS POWER PLANT\LP-PLN.DWG
SEPTEMBER 16, 2003



20 A3 SECOND FLOOR PLAN
SCALE: 1/4" = 1'
2003\LENIUS POWER PLANT\LP-PLN.DWG
SEPTEMBER 16, 2003

the Design Alliance Architects, Inc.
1003 Madison Avenue
Fort Atkinson, WI
(920) 563-3404
FAX (920) 568-7058

POWER PLANT APARTMENTS
S. Concord Avenue
Watertown, WI

SHEET TITLE
SECOND FLOOR PLAN

REVISIONS

PROJECT DATA
DATE: 4/13/2005
JOB NO.
DRAWN BY: CL
CHECKED BY:
SHEET NO.
A-3

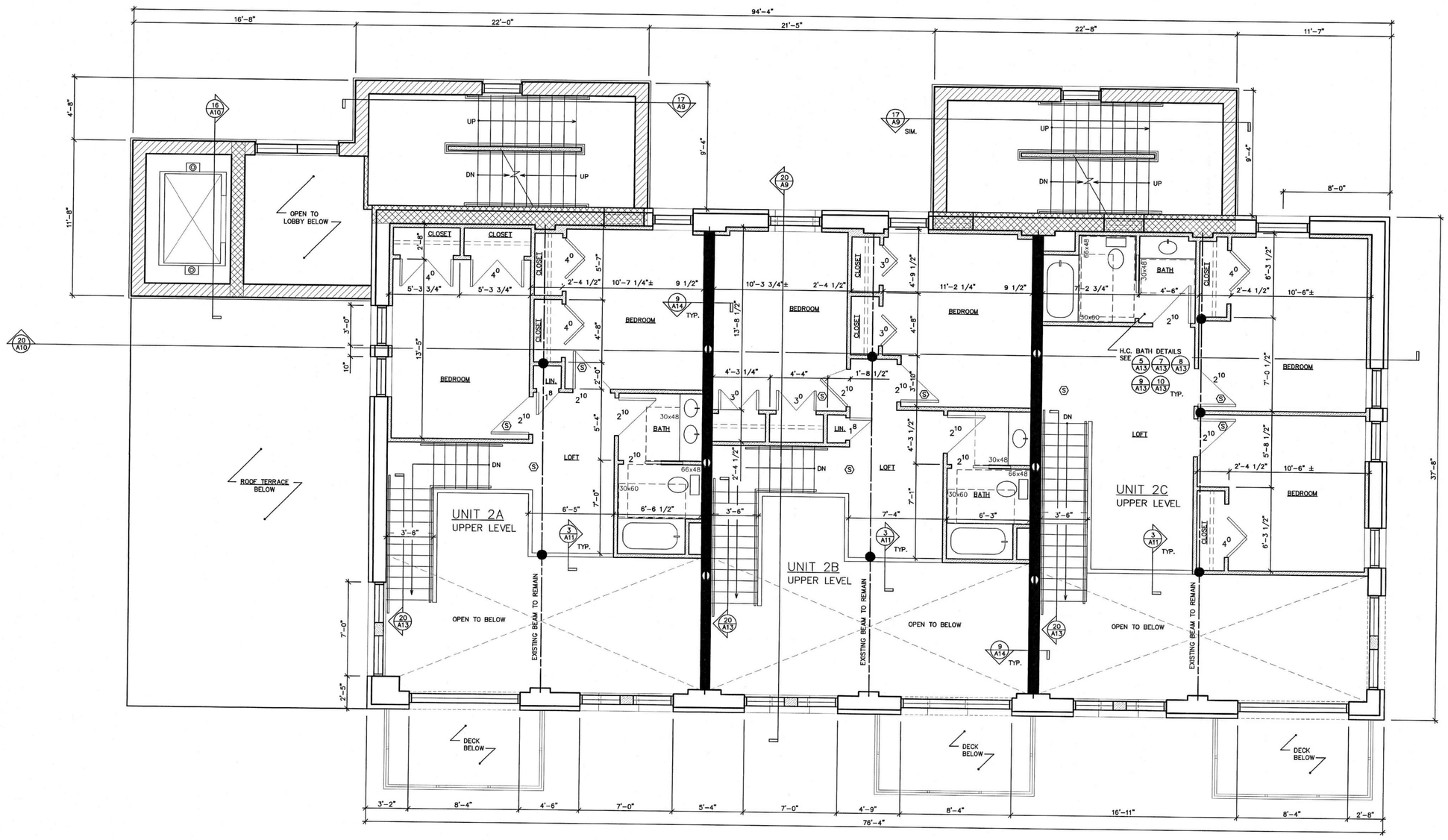
GENERAL NOTES:

* PROVIDE FIRE ALARM SYSTEM PER IBC 907.2.9
* AUTOMATIC SPRINKLER SYSTEM PER IBC 903 REQUIREMENTS
* PROVIDE SMOKE DETECTORS PER IBC 907.2.10 REQUIREMENTS
* ALL DOORS TO RECEIVE LEVER TYPE DOOR HANDLES
* FIRE DOORS -- ALL NOTED RATINGS ARE FOR ENTIRE DOOR, FRAME, AND CLOSURE ASSEMBLIES.

LEGEND:

NEW FIRE-RATED DOOR (SEE PLAN FOR FOR RATING)
EXISTING DOOR TO REMAIN
NEW DOOR
EXISTING DOOR TO BE REMOVED
NEW STUD WALL 3 5/8" STEEL STUDS TYP. - UNLESS NOTED OTHERWISE
NEW MASONRY WALL
2-HR FIRE WALL
1-HR FIRE WALL - SEE DETAILS 4/A14 AND 9/A14
EXISTING MASONRY WALL (SIZE VARIES -- 24" MAX., 12" MIN.)
EXISTING WALLS/ITEMS TO BE REMOVED
SMOKE DETECTOR HARD-WIRED PER IBC 907.2.10
2A FIRE EXTINGUISHER (2A RATED)
EXIT APPROVED, ILLUMINATED EXIT SIGN TYP.

5/A4 LEGEND
SCALE: 1/4" = 1'
2003\LENIUS POWER PLANT\LP-PLN.DWG
SEPTEMBER 16, 2003



20/A4 THIRD FLOOR PLAN
SCALE: 1/4" = 1'
2003\LENIUS POWER PLANT\LP-PLN.DWG
SEPTEMBER 16, 2003

the Design Alliance Architects, Inc.
1003 Madison Avenue
Fort Atkinson, WI
(920) 563-3404
FAX (920) 568-7058

POWER PLANT APARTMENTS
S. Concord Avenue
Watertown, WI

SHEET TITLE
THIRD FLOOR PLAN

REVISIONS

PROJECT DATA
DATE: 4/13/2005
JOB NO.
DRAWN BY: CL
CHECKED BY:
SHEET NO.
A-4

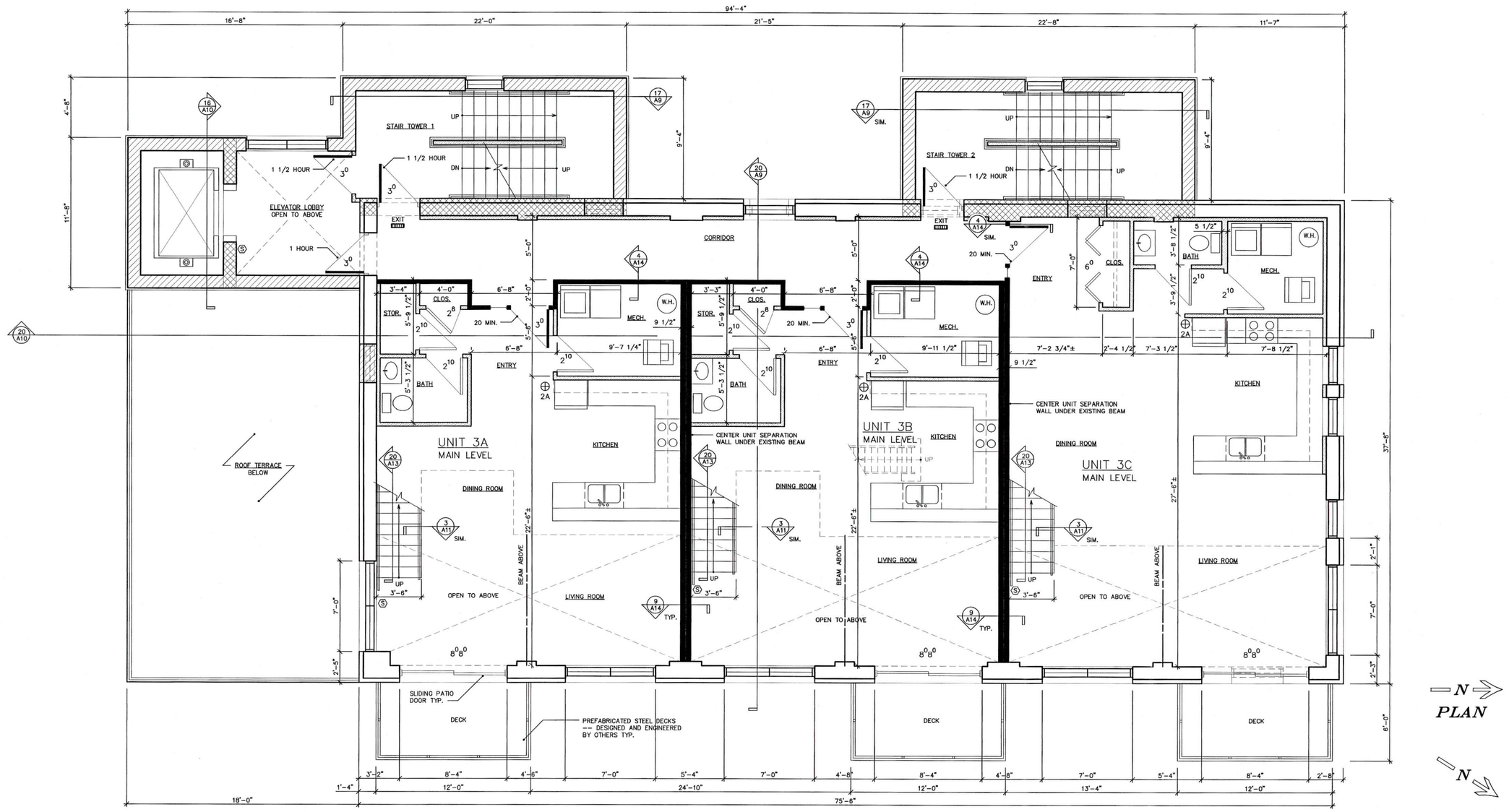
GENERAL NOTES:

* PROVIDE FIRE ALARM SYSTEM PER IBC 907.2.9
* AUTOMATIC SPRINKLER SYSTEM PER IBC 903 REQUIREMENTS
* PROVIDE SMOKE DETECTORS PER IBC 907.2.10 REQUIREMENTS
* ALL DOORS TO RECEIVE LEVER TYPE DOOR HANDLES
* FIRE DOORS -- ALL NOTED RATINGS ARE FOR ENTIRE DOOR, FRAME, AND CLOSURE ASSEMBLIES.

LEGEND:

NEW FIRE-RATED DOOR (SEE PLAN FOR FOR RATING)
EXISTING DOOR TO REMAIN
NEW DOOR
EXISTING DOOR TO BE REMOVED
NEW STUD WALL 3 5/8" STEEL STUDS TYP. - UNLESS NOTED OTHERWISE
NEW MASONRY WALL
2-HR FIRE WALL
1-HR FIRE WALL - SEE DETAILS 4/A14 AND 9/A14
EXISTING MASONRY WALL (SIZE VARIES -- 24" MAX., 12" MIN.)
EXISTING WALLS/ITEMS TO BE REMOVED
SMOKE DETECTOR HARD-WIRED PER IBC 907.2.10
2A FIRE EXTINGUISHER (2A RATED)
EXIT APPROVED, ILLUMINATED EXIT SIGN TYP.

5 / A5 LEGEND
SCALE: 1/4" = 1'
2003\LENIUS POWER PLANT\LP-PLN.DWG
SEPTEMBER 16, 2003



20 / A5 FOURTH FLOOR PLAN
SCALE: 1/4" = 1'
2003\LENIUS POWER PLANT\LP-PLN.DWG
SEPTEMBER 16, 2003

the Design Alliance Architects, Inc.
1003 Madison Avenue
Fort Atkinson, WI
(920) 563-3404
FAX (920) 568-7058

POWER PLANT APARTMENTS
S. Concord Avenue
Watertown, WI

SHEET TITLE
FOURTH FLOOR PLAN

REVISIONS

PROJECT DATA
DATE: 4/13/2005
JOB NO.
DRAWN BY: CL
CHECKED BY:
SHEET NO.
A-5

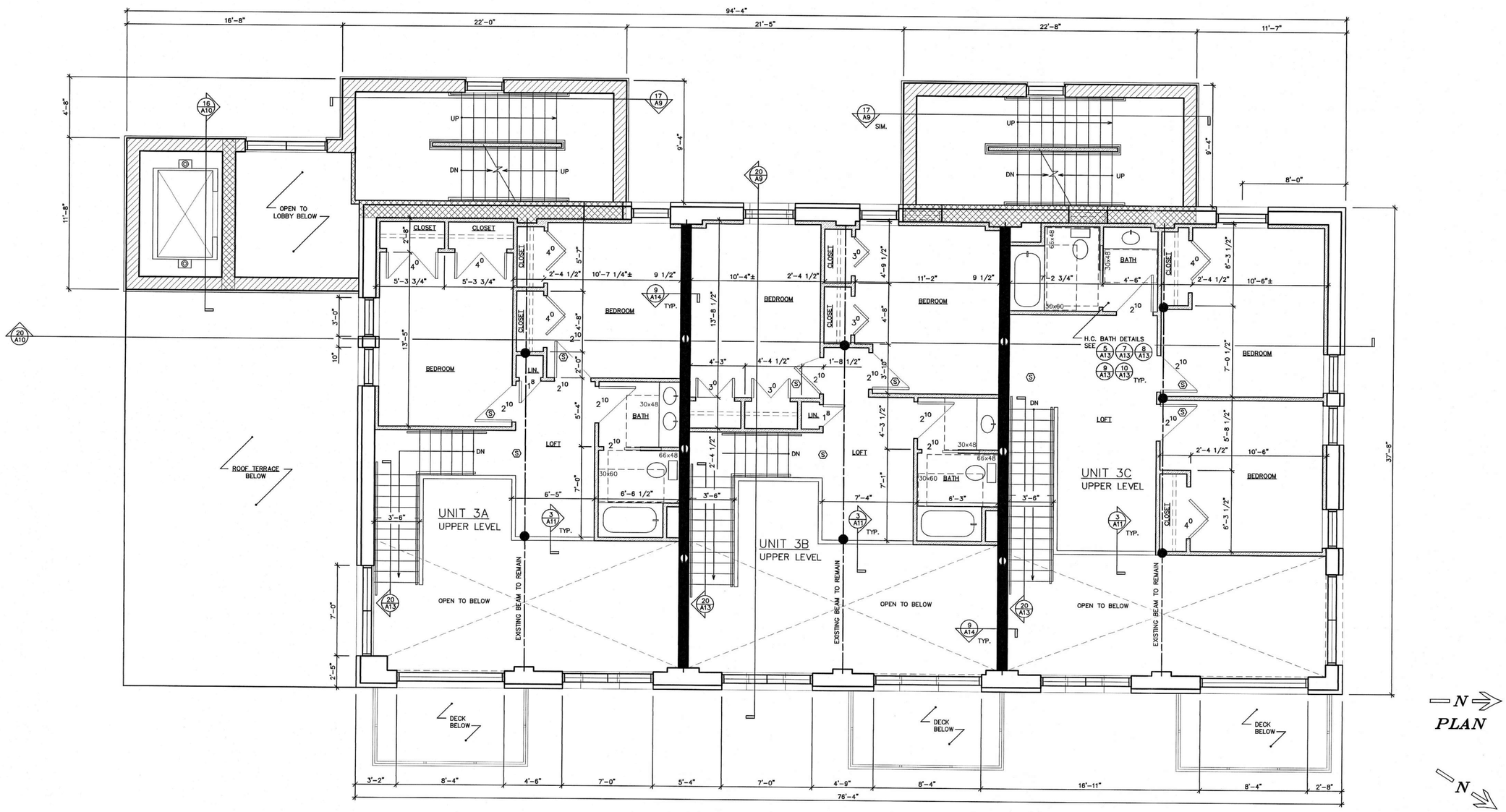
GENERAL NOTES:

* PROVIDE FIRE ALARM SYSTEM PER IBC 907.2.9
* AUTOMATIC SPRINKLER SYSTEM PER IBC 903 REQUIREMENTS
* PROVIDE SMOKE DETECTORS PER IBC 907.2.10 REQUIREMENTS
* ALL DOORS TO RECEIVE LEVER TYPE DOOR HANDLES
* FIRE DOORS -- ALL NOTED RATINGS ARE FOR ENTIRE DOOR, FRAME, AND CLOSURE ASSEMBLIES.

LEGEND:

- NEW FIRE-RATED DOOR (SEE PLAN FOR FOR RATING)
- EXISTING DOOR TO REMAIN
- NEW STUD WALL 3 5/8" STEEL STUDS TYP. - UNLESS NOTED OTHERWISE
- 2-HR FIRE WALL
- EXISTING MASONRY WALL (SIZE VARIES -- 24" MAX., 12" MIN.)
- SMOKE DETECTOR HARD-WIRED PER IBC 907.2.10
- 2A FIRE EXTINGUISHER (2A RATED)
- NEW DOOR
- EXISTING DOOR TO BE REMOVED
- NEW MASONRY WALL
- 1-HR FIRE WALL - SEE DETAILS 4/A14 AND 9/A14
- EXISTING WALLS/ITEMS TO BE REMOVED
- EXIT APPROVED, ILLUMINATED EXIT SIGN TYP.

5/A6 LEGEND
SCALE: 1/4" = 1'
2003\LENIUS POWER PLANT\LP-PLN.DWG
SEPTEMBER 16, 2003



20/A6 FIFTH FLOOR PLAN
SCALE: 1/4" = 1'
2003\LENIUS POWER PLANT\LP-PLN.DWG
SEPTEMBER 16, 2003

the Design Alliance Architects, Inc.
1003 Madison Avenue
Fort Atkinson, WI
(920) 563-3404
FAX (920) 568-7058

POWER PLANT APARTMENTS
S. Concord Avenue
Watertown, WI

SHEET TITLE
FIFTH FLOOR PLAN

REVISIONS

PROJECT DATA
DATE: 4/13/2005
JOB NO.
DRAWN BY: CL
CHECKED BY:
SHEET NO.
A-6

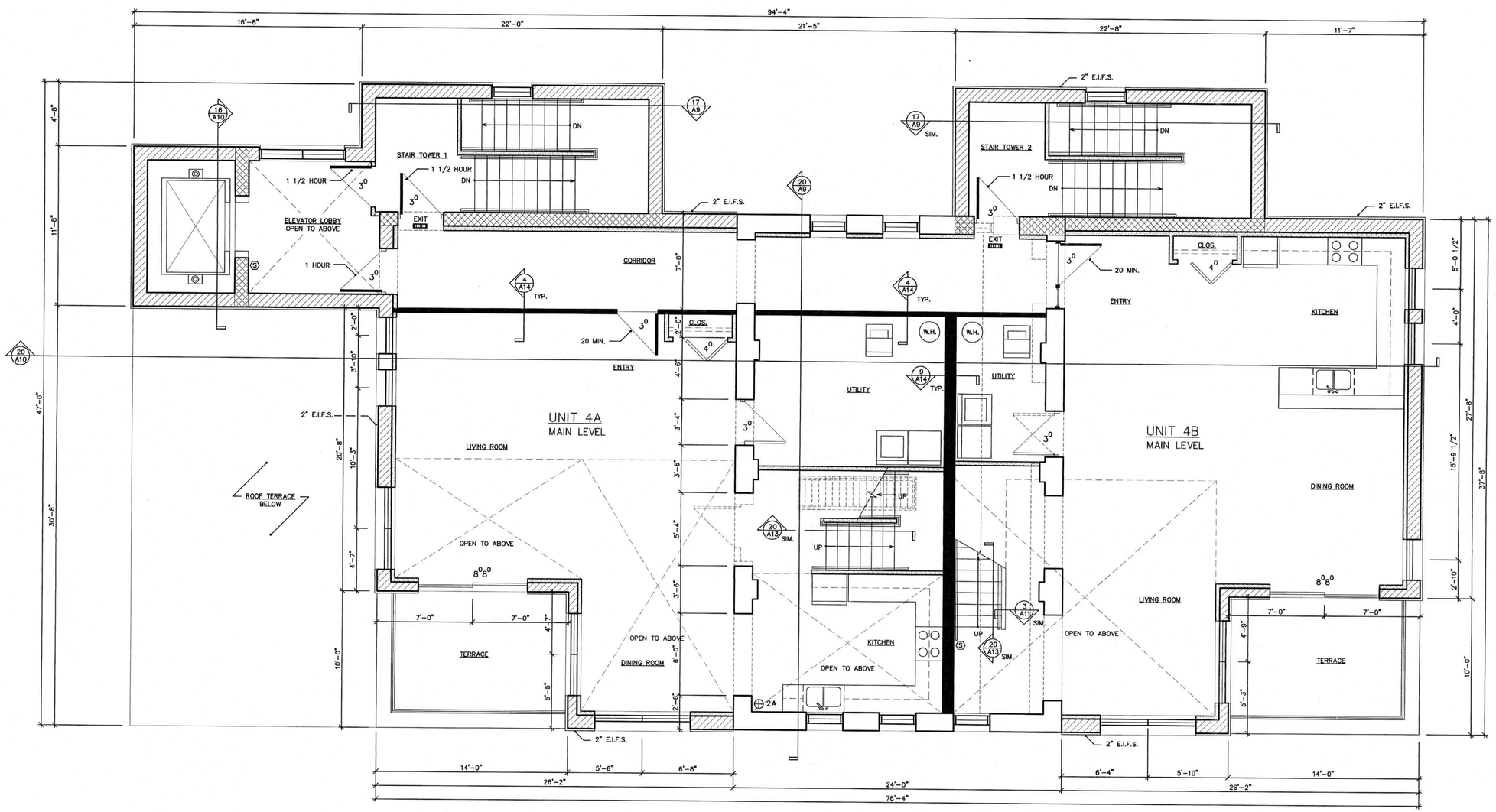
GENERAL NOTES:

* PROVIDE FIRE ALARM SYSTEM PER IBC 907.2.9
* AUTOMATIC SPRINKLER SYSTEM PER IBC 903 REQUIREMENTS
* PROVIDE SMOKE DETECTORS PER IBC 907.2.10 REQUIREMENTS
* ALL DOORS TO RECEIVE LEVER TYPE DOOR HANDLES
* FIRE DOORS -- ALL NOTED RATINGS ARE FOR ENTIRE DOOR, FRAME, AND CLOSURE ASSEMBLIES.

LEGEND:

NEW FIRE-RATED DOOR (SEE PLAN FOR FOR RATING)
EXISTING DOOR TO REMAIN
NEW STUD WALL 3 5/8" STEEL STUDS TYP. - UNLESS NOTED OTHERWISE
2-HR FIRE WALL
EXISTING MASONRY WALL (SIZE VARIES -- 24" MAX., 12" MIN.)
S SMOKE DETECTOR HARD-WIRED PER IBC 907.2.10
2A FIRE EXTINGUISHER (2A RATED)
NEW DOOR
EXISTING DOOR TO BE REMOVED
NEW MASONRY WALL
1-HR FIRE WALL - SEE DETAILS 4/A14 AND 9/A14
EXISTING WALLS/ITEMS TO BE REMOVED
EXIT APPROVED, ILLUMINATED EXIT SIGN TYP.

5/A7 LEGEND
SCALE: 1/4" = 1'
2003\LENIUS POWER PLANT\LP-PLN.DWG
SEPTEMBER 16, 2003



20/A7 SIXTH FLOOR PLAN
SCALE: 1/4" = 1'
2003\LENIUS POWER PLANT\LP-PLN.DWG
SEPTEMBER 16, 2003

Design Alliance Architects, Inc.
1003 Madison Avenue
Fort Atkinson, WI
(920) 563-3404
FAX (920) 568-7058

POWER PLANT APARTMENTS
S. Concord Avenue
Watertown, WI

SHEET TITLE
SIXTH FLOOR PLAN

REVISIONS

PROJECT DATA
DATE: 4/13/2005
JOB NO.
DRAWN BY: CL
CHECKED BY:
SHEET NO.
A-7

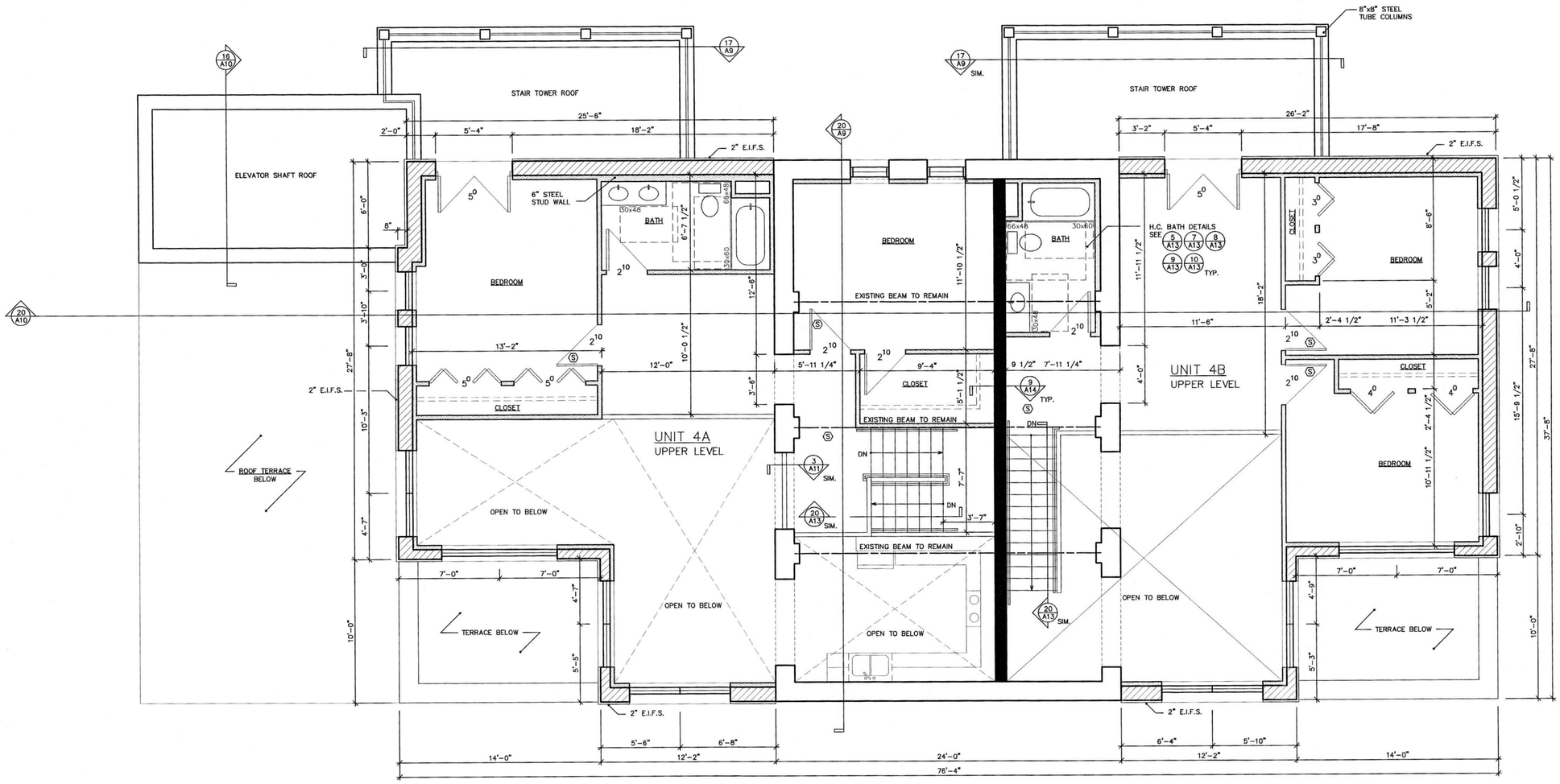
GENERAL NOTES:

* PROVIDE FIRE ALARM SYSTEM PER IBC 907.2.9
* AUTOMATIC SPRINKLER SYSTEM PER IBC 903 REQUIREMENTS
* PROVIDE SMOKE DETECTORS PER IBC 907.2.10 REQUIREMENTS
* ALL DOORS TO RECEIVE LEVER TYPE DOOR HANDLES
* FIRE DOORS -- ALL NOTED RATINGS ARE FOR ENTIRE DOOR, FRAME, AND CLOSURE ASSEMBLIES.

LEGEND:

NEW FIRE-RATED DOOR (SEE PLAN FOR FOR RATING)
EXISTING DOOR TO REMAIN
NEW DOOR
EXISTING DOOR TO BE REMOVED
NEW STUD WALL 3 5/8" STEEL STUDS TYP. - UNLESS NOTED OTHERWISE
NEW MASONRY WALL
2-HR FIRE WALL
1-HR FIRE WALL - SEE DETAILS 4/A14 AND 9/A14
EXISTING MASONRY WALL (SIZE VARIES -- 24" MAX., 12" MIN.)
EXISTING WALLS/ITEMS TO BE REMOVED
(S) SMOKE DETECTOR HARD-WIRED PER IBC 907.2.10
2A FIRE EXTINGUISHER (2A RATED)
EXIT APPROVED, ILLUMINATED EXIT SIGN TYP.

5/A8 LEGEND
SCALE: 1/4" = 1'
2003\LENIUS POWER PLANT\LP-PLN.DWG
SEPTEMBER 16, 2003



20/A8 SEVENTH FLOOR PLAN
SCALE: 1/4" = 1'
2003\LENIUS POWER PLANT\LP-PLN.DWG
SEPTEMBER 16, 2003

Design Alliance Architects, Inc.
1003 Madison Avenue
Fort Atkinson, WI
(920) 563-3404
FAX (920) 568-7058

POWER PLANT APARTMENTS
S. Concord Avenue
Watertown, WI

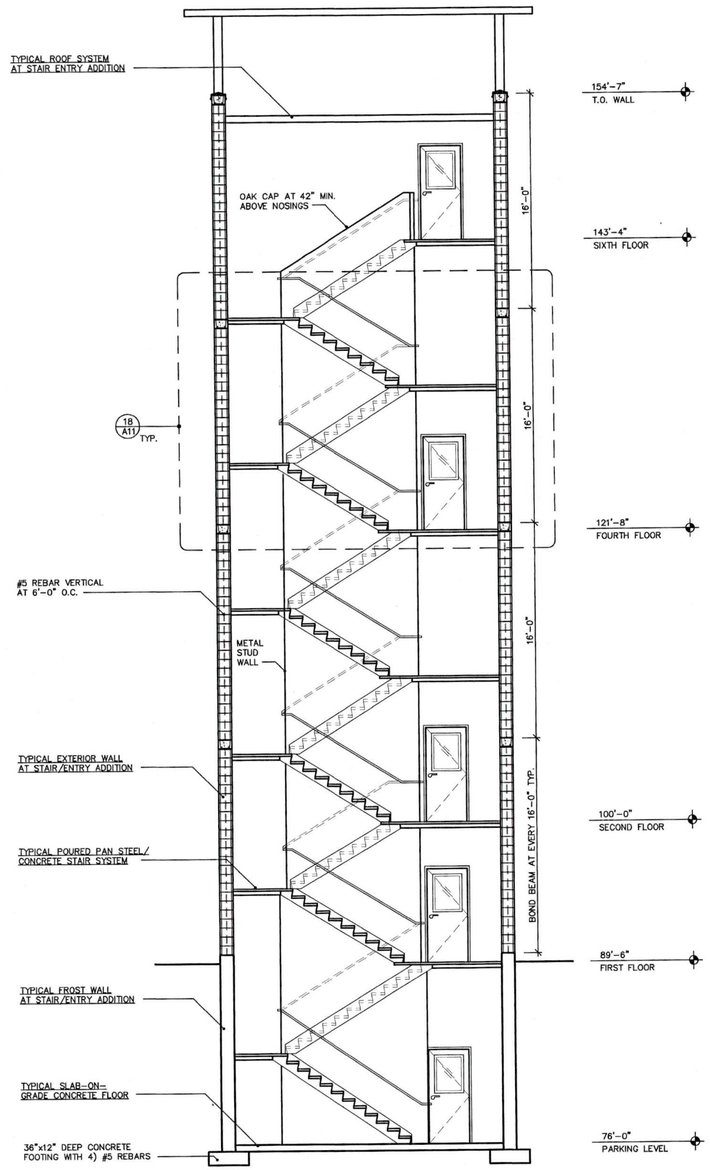
SHEET TITLE
SEVENTH FLOOR LOFT PLAN

REVISIONS

PROJECT DATA
DATE: 4/13/2005
JOB NO.
DRAWN BY: CL
CHECKED BY:
SHEET NO.
A-8

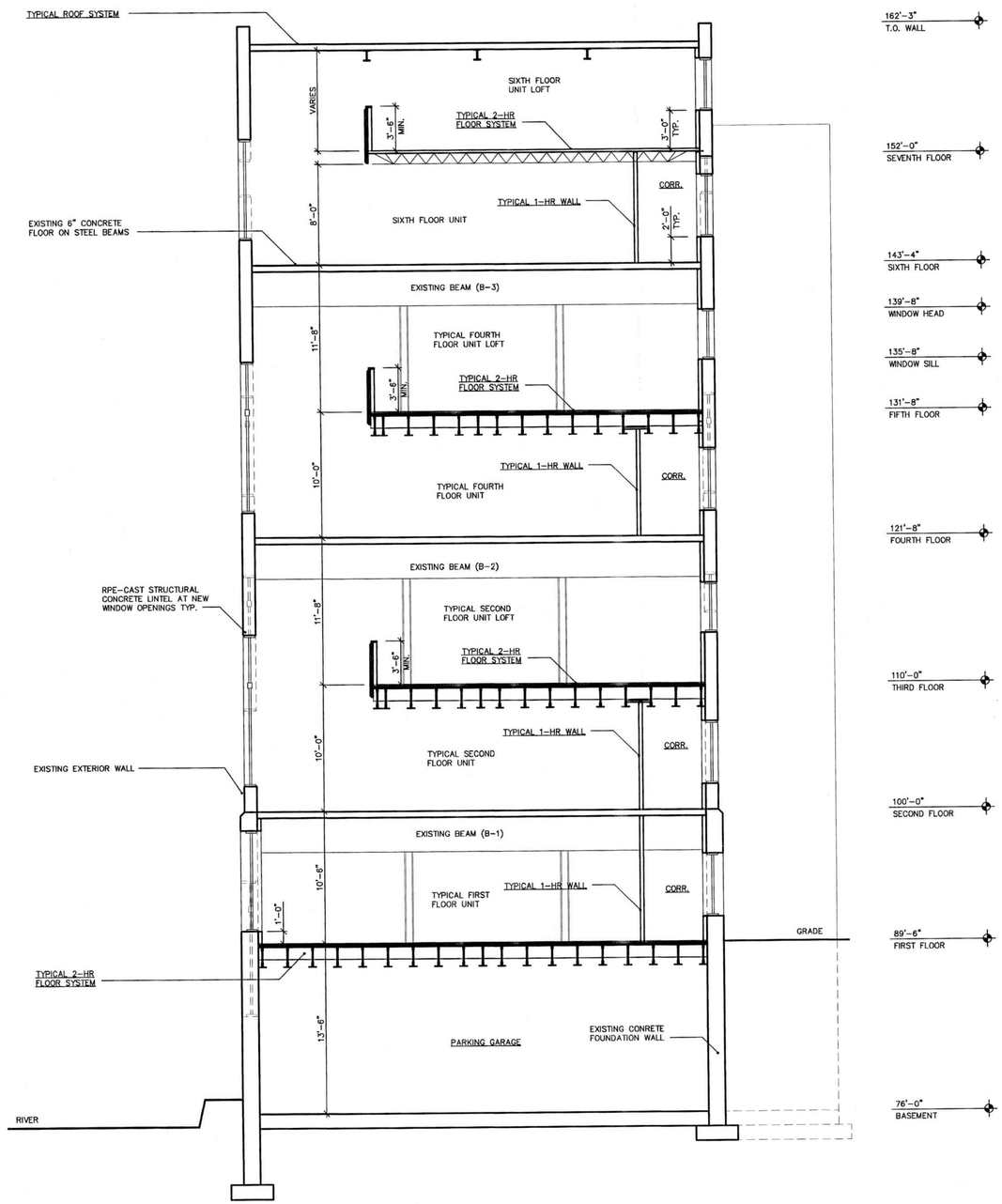
NOTE: REFER TO TYPICAL CONSTRUCTS 17/SP1 FOR DEFINITION OF EACH CONSTRUCT DESIGNATED WITH UNDERLINED TEXT TYP.

* OWNER / GENERAL CONTRACTOR TO CONFIRM FLOOR-TO-FLOOR HEIGHTS, AND SPACE REQUIREMENTS OF STAIRS PRIOR TO CONSTRUCTION START.



17 A9 STAIR TOWER SECTION
SCALE: 3/16" = 1'
2003\LENIUS POWER PLANT\LP-STAIRTOWER.DWG
SEPTEMBER 19, 2003

NOTE: REFER TO TYPICAL CONSTRUCTS 17/SP1 FOR DEFINITION OF EACH CONSTRUCT DESIGNATED WITH UNDERLINED TEXT TYP.



20 A9 BUILDING SECTION
SCALE: 3/16" = 1'
2003\LENIUS POWER PLANT\LP-BSCT01.DWG
SEPTEMBER 18, 2003

the Design Alliance Architects, Inc.
1003 Madison Avenue
Fort Atkinson, WI
(920) 563-3404
FAX (920) 568-7058

POWER PLANT APARTMENTS
S. Concord Avenue
Watertown, WI

SHEET TITLE

STAIR SECTION
BUILDING SECTION

REVISIONS

PROJECT DATA

DATE: 4/13/2005

JOB NO.

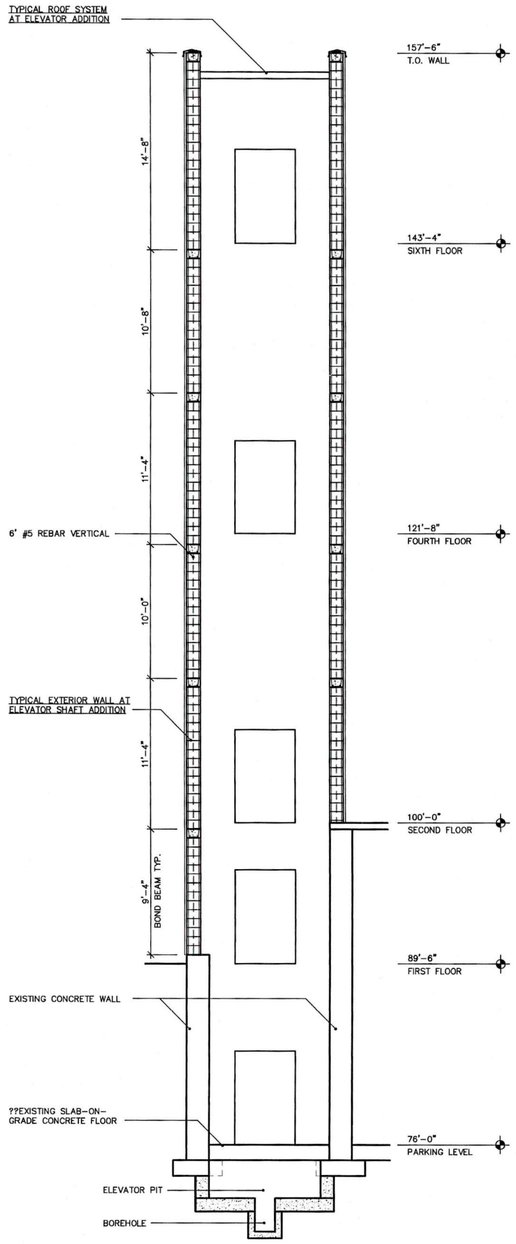
DRAWN BY: CL

CHECKED BY:

SHEET NO.

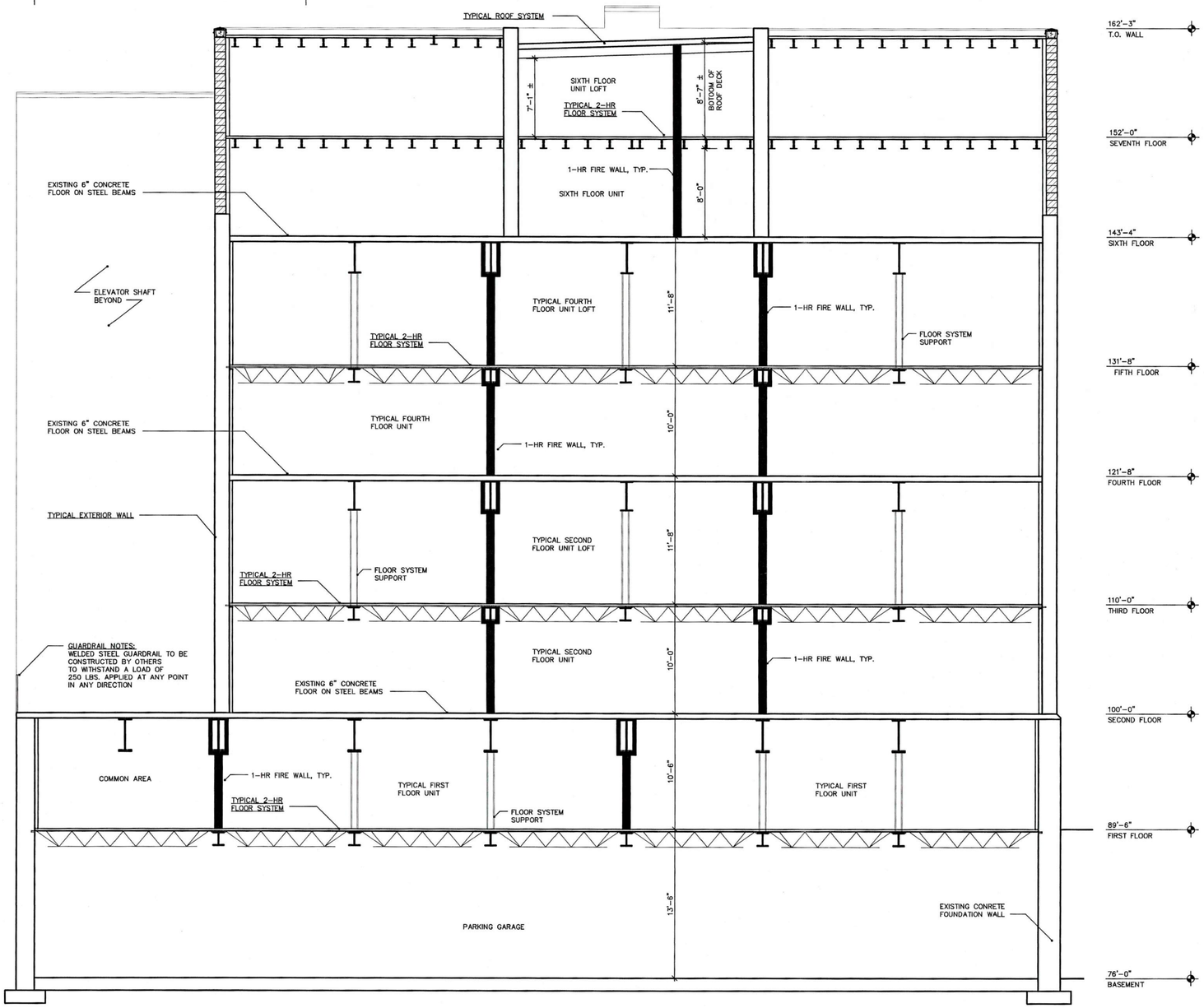
A-9

NOTE: REFER TO TYPICAL CONSTRUCTS 17/SP1 FOR DEFINITION OF EACH CONSTRUCT DESIGNATED WITH UNDERLINED TEXT TYP.



16 / A10 ELEVATOR SHAFT SECTION
SCALE: 3/16" = 1'
2003\LENIUS POWER PLANT\LP-ELEVTOWER.DWG
JANUARY 22, 2004

NOTE: REFER TO TYPICAL CONSTRUCTS 17/SP1 FOR DEFINITION OF EACH CONSTRUCT DESIGNATED WITH UNDERLINED TEXT TYP.



20 / A10 BUILDING SECTION
SCALE: 3/16" = 1'
2003\LENIUS POWER PLANT\LP-BSCT02.DWG
SEPTEMBER 18, 2003

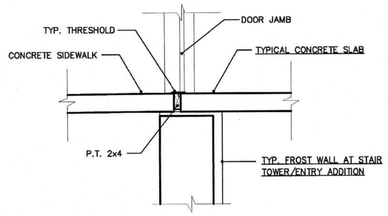
Design Alliance Architects, Inc.
1003 Madison Avenue
Fort Atkinson, WI
(920) 563-3404
FAX (920) 568-7058

POWER PLANT APARTMENTS
S. Concord Avenue
Watertown, WI

SHEET TITLE
BUILDING SECTION

REVISIONS

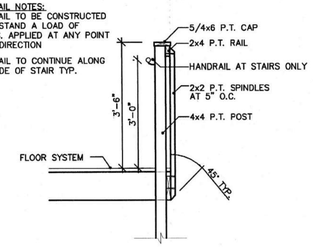
PROJECT DATA
DATE: 4/13/2005
JOB NO.
DRAWN BY: CL
CHECKED BY:
SHEET NO.
A-10



2 A11 TYPICAL DOOR THRESHOLD DETAIL
SCALE: 3/4" = 1'
2003\LENIUS POWER PLANT\LP-DTL10.DWG
FEBRUARY 4, 2004

GUARDRAIL NOTES:
GUARDRAIL TO BE CONSTRUCTED TO WITHSTAND A LOAD OF 200 LBS. APPLIED AT ANY POINT IN ANY DIRECTION

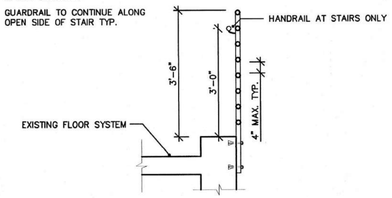
GUARDRAIL TO CONTINUE ALONG OPEN SIDE OF STAIR TYP.



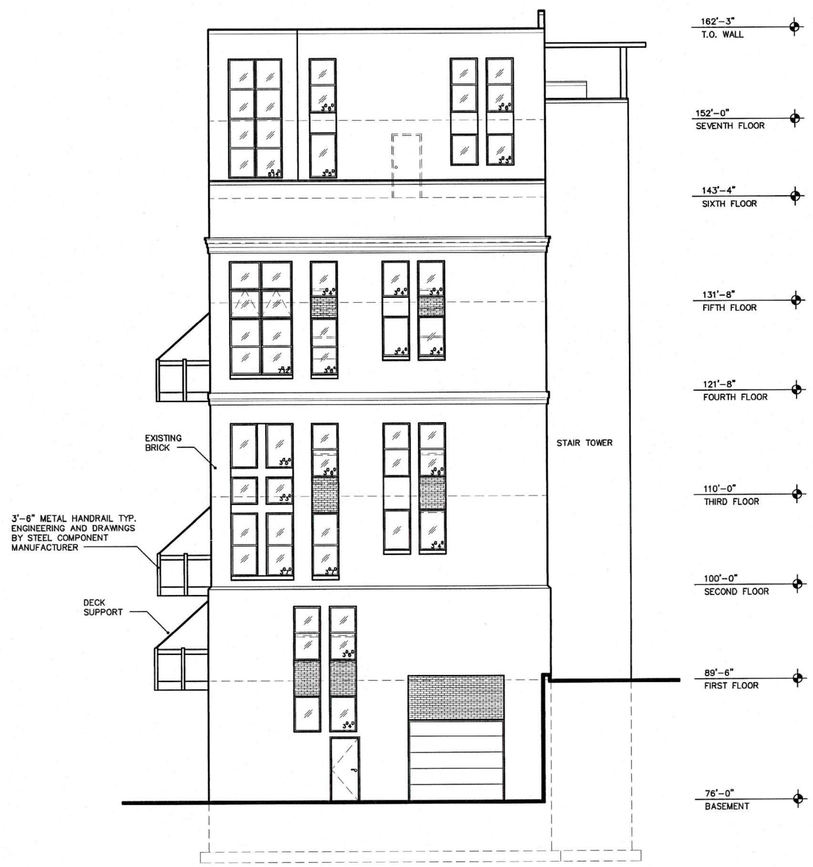
3 A11 INTERIOR RAILING SECTION (LOFT/STAIR)
SCALE: 1/2" = 1'
2003\LENIUS POWER PLANT\LP-DTL09.DWG
FEBRUARY 3, 2004

GUARDRAIL NOTES:
GUARDRAIL TO BE CONSTRUCTED TO WITHSTAND A LOAD OF 250 LBS. APPLIED AT ANY POINT IN ANY DIRECTION

GUARDRAIL TO CONTINUE ALONG OPEN SIDE OF STAIR TYP.



4 A11 EXTERIOR RAILING SECTION
SCALE: 1/2" = 1'
2003\LENIUS POWER PLANT\LP-DTL15.DWG
FEBRUARY 7, 2005



NORTH ELEVATION

17 A11 ELEVATION
SCALE: 1/8" = 1'
2003\LENIUS POWER PLANT\LP-ELEVNE.DWG
OCTOBER 3, 2003

EAST ELEVATION

20 A11 ELEVATION
SCALE: 1/8" = 1'
2003\LENIUS POWER PLANT\LP-ELEVNE.DWG
OCTOBER 3, 2003

the Design Alliance Architects, Inc.
1003 Madison Avenue
Fort Atkinson, WI
(920) 563-3404
FAX (920) 568-7058

POWER PLANT APARTMENTS
S. Concord Avenue
Watertown, WI

SHEET TITLE

EAST ELEVATION
NORTH ELEVATION
RAILING DETAILS
THRESHOLD DETAIL

REVISIONS

PROJECT DATA

DATE: 4/13/2005

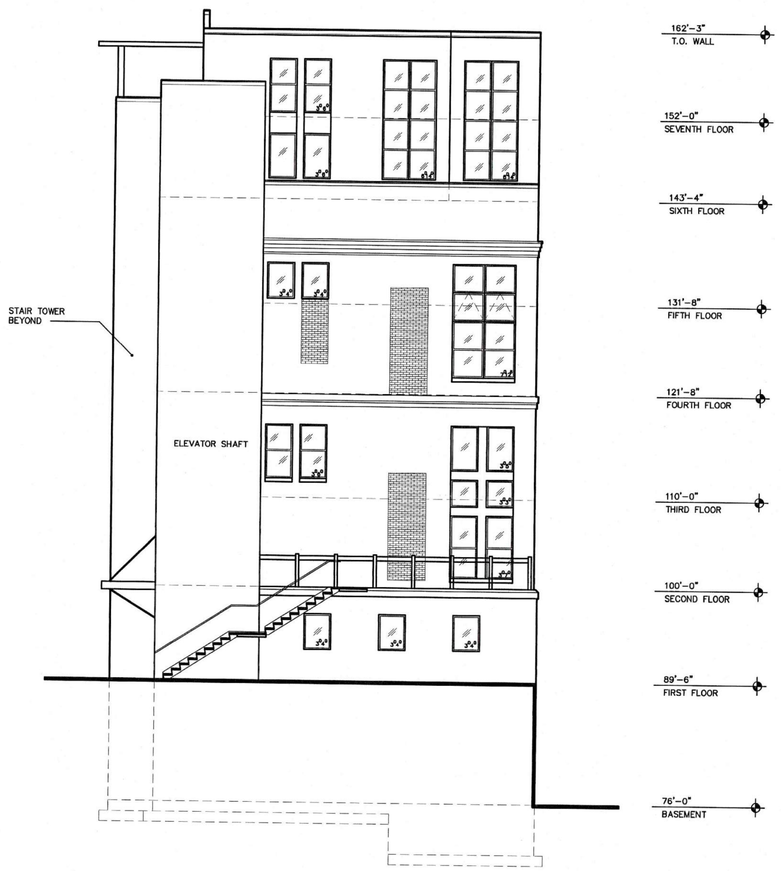
JOB NO.

DRAWN BY: CL

CHECKED BY:

SHEET NO.

A-11



SOUTH ELEVATION

17
A12

ELEVATION
SCALE: 1/8" = 1'
2003\LENIUS POWER PLANT\LP-ELEV.DWG
OCTOBER 3, 2003

WEST ELEVATION

20
A12

ELEVATION
SCALE: 1/8" = 1'
2003\LENIUS POWER PLANT\LP-ELEV.DWG
OCTOBER 3, 2003

the Design Alliance Architects, Inc.
1003 Madison Avenue
Fort Atkinson, WI
(920) 563-3404
FAX (920) 568-7058

POWER PLANT APARTMENTS
S. Concord Avenue
Watertown, WI

SHEET TITLE

WEST ELEVATION
SOUTH ELEVATION

REVISIONS

PROJECT DATA

DATE: 4/13/2005

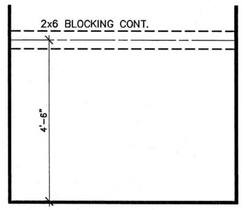
JOB NO.

DRAWN BY: CL

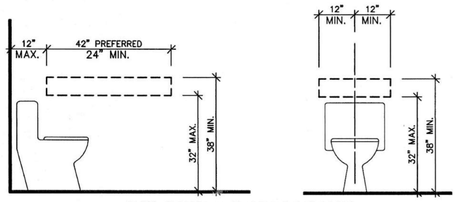
CHECKED BY:

SHEET NO.

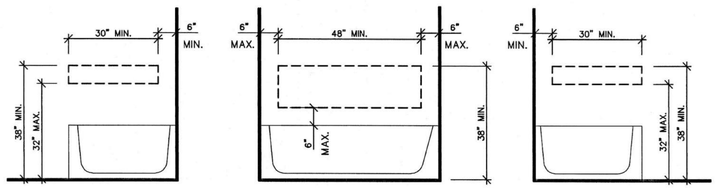
A-12



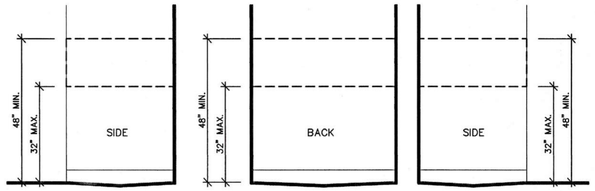
TOWEL BAR BLOCKING ON OPEN WALLS



WATER CLOSETS IN ADAPTABLE BATHROOMS

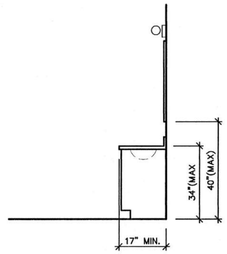


LOCATION OF GRAB BAR REINFORCEMENTS FOR ADAPTABLE BATHTUBS

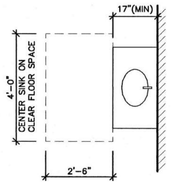


LOCATION OF GRAB BAR REINFORCEMENTS FOR ADAPTABLE SHOWERS

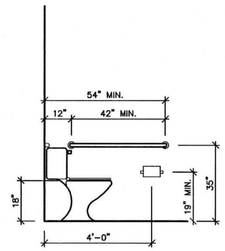
5 / A13 — BATHROOM BLOCKING DETAILS
SCALE: 1/2" = 1'
2003\LENIUS POWER PLANT\LP-DTL07.DWG
JANUARY 22, 2004



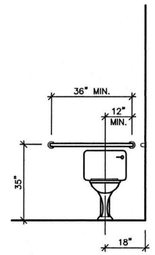
7 / A13 — STANDARD VANITY ELEVATION
SCALE: 3/8" = 1'
2003\LENIUS POWER PLANT\LP-DTL05.DWG
JANUARY 22, 2004



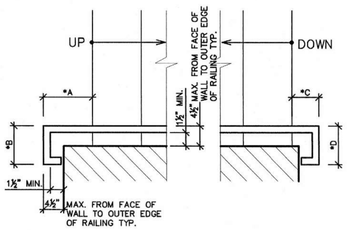
8 / A13 — STANDARD VANITY PLAN
SCALE: 3/8" = 1'
2003\LENIUS POWER PLANT\LP-DTL04.DWG
JANUARY 22, 2004



9 / A13 — SIDE WALL ELEVATION
SCALE: 3/8" = 1'
2003\LENIUS POWER PLANT\LP-DTL02.DWG
JANUARY 22, 2004



10 / A13 — BACK WALL ELEVATION
SCALE: 3/8" = 1'
2003\LENIUS POWER PLANT\LP-DTL02.DWG
JANUARY 22, 2004



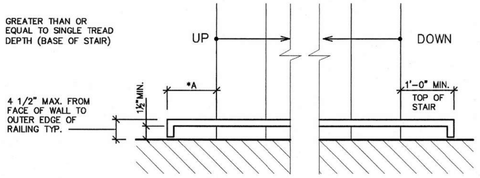
NOTE:
ALL HANDRAILS TO RETURN TO WALLS AS SHOWN.
*DIMENSIONS "A" + "B" ARE GREATER THAN OR EQUAL TO SINGLE TREAD DEPTH. (BASE OF STAIR)

*DIMENSIONS "C" + "D" = 1'-0" MIN. (TOP OF STAIR)

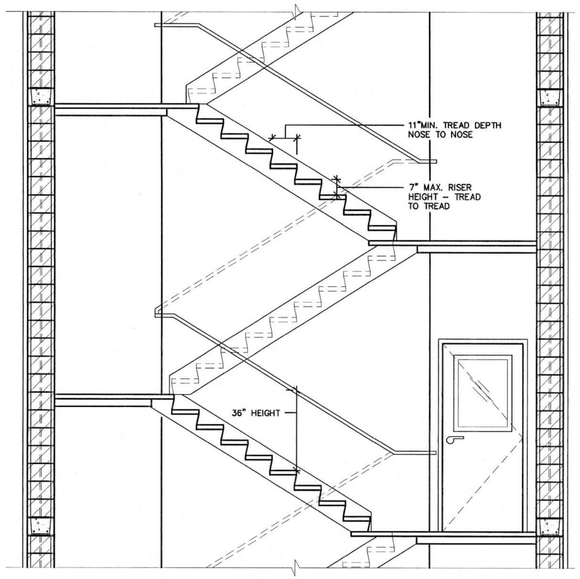
12 / A13 — STAIR HANDRAIL PLAN DETAIL
NOT TO SCALE
2003\\LENIUS POWER PLANT\LP-DTL12.DWG
FEBRUARY 9, 2004

NOTE:
ALL HANDRAILS TO RETURN TO WALLS AS SHOWN.

*A GREATER THAN OR EQUAL TO SINGLE TREAD DEPTH (BASE OF STAIR)

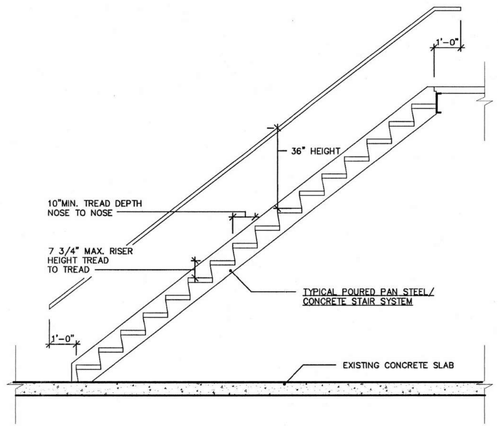


17 / A13 — STAIR HANDRAIL PLAN DETAIL
NOT TO SCALE
2003\LENIUS POWER PLANT\LP-DTL11.DWG
FEBRUARY 9, 2004



* HANDRAIL NOTE:
RETURN ALL HANDRAILS TO WALL – SEE DETAILS 12 AND 17/A11

18 / A13 — STAIR DETAIL AT STAIR TOWER TYP.
SCALE: 3/8" = 1'
2003\LENIUS POWER PLANT\LP-STAIR2.DWG
FEBRUARY 9, 2004



* HANDRAIL NOTE:
RETURN ALL HANDRAILS TO WALL – SEE DETAILS 12 AND 17/A11

20 / A13 — UNIT STAIR DETAIL TYP.
SCALE: 3/8" = 1'
2003\LENIUS POWER PLANT\LP-STAIR1.DWG
FEBRUARY 2, 2004

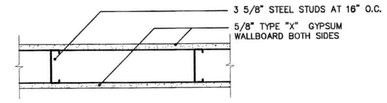
the Design Alliance Architects, Inc.
1003 Madison Avenue
Fort Atkinson, WI
(920) 563-3404
FAX (920) 568-7058

POWER PLANT APARTMENTS
S. Concord Avenue
Watertown, WI

SHEET TITLE
H.C. BATH DTL'S
STAIR DETAILS

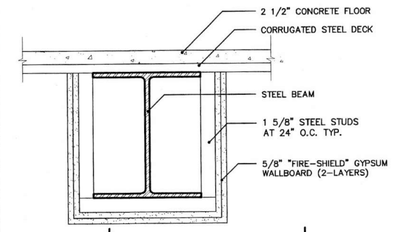
REVISIONS

PROJECT DATA
DATE: 4/13/2004
JOB NO.
DRAWN BY: CL
CHECKED BY:
SHEET NO.
A-13



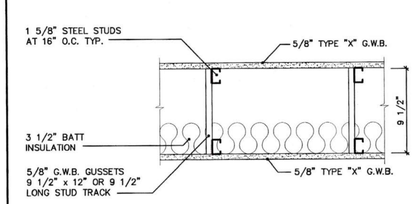
NOTE: 1-HR RATED WALL -- INSTALATION PER U.L. #U465 REQUIREMENTS

4 / A14 TYPICAL 1-HR FIRE BARRIER
SCALE: 1-1/2" = 1'
2003\LENIUS POWER PLANT\LP-DTL14.DWG
JANUARY 29, 2004



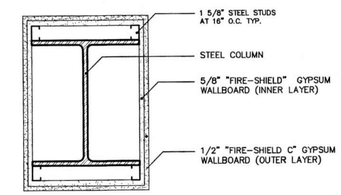
NOTE: 2-HR RATED BEAM -- INSTALATION PER U.L. #N501 OR GA #BM 2120 REQUIREMENTS

5 / A14 2-HR BEAM FIREPROOFING
SCALE: 1-1/2" = 1'
2003\LENIUS POWER PLANT\LP-DTL14.DWG
JANUARY 14, 2004



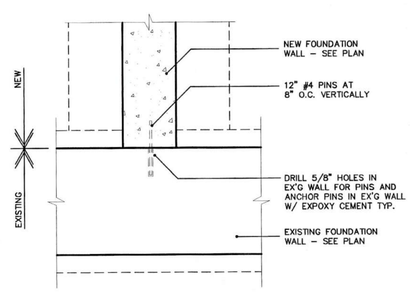
NOTE: 1-HR RATED WALL -- INSTALATION PER U.L. #U420 REQUIREMENTS

9 / A14 TYPICAL 1-HOUR FIRE PARTITION WALL
SCALE: 1-1/2" = 1'
2003\LENIUS POWER PLANT\LP-DTL14.DWG
JANUARY 14, 2004

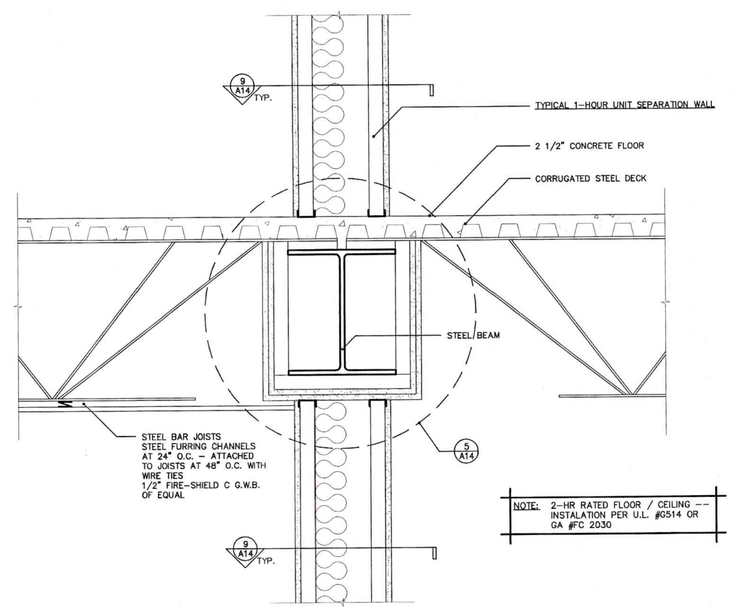


NOTE: 2-HR RATED COLUMN -- INSTALATION PER U.L. #X528 OR GA #CM 2017 REQUIREMENTS

10 / A14 2-HR COLUMN FIREPROOFING
SCALE: 1-1/2" = 1'
2003\LENIUS POWER PLANT\LP-DTL14.DWG
JANUARY 14, 2004



18 / A14 FOUNDATION PINNING DETAIL
SCALE: 3/4" = 1'
2003\LENIUS POWER PLANT\LP-DTL13.DWG
FEBRUARY 1, 2005



NOTE: 2-HR RATED FLOOR / CEILING -- INSTALATION PER U.L. #G514 OR GA #FC 2030

20 / A14 2-HR FLOOR SYSTEM
SCALE: 1-1/2" = 1'
2003\LENIUS POWER PLANT\LP-DTL14.DWG
FEBRUARY 7, 2005

Design Alliance Architects, Inc.
1003 Madison Avenue
Fort Atkinson, WI
(920) 563-3404
FAX (920) 568-2058

POWER PLANT APARTMENTS
S. Concord Avenue
Watertown, WI

SHEET TITLE

FIREPROOFING DETAILS
FOUNDATION PINNING DETAIL

REVISIONS

PROJECT DATA

DATE: 4/13/2005

JOB NO.

DRAWN BY: CL

CHECKED BY:

SHEET NO.

A-14

2007
REDIGAS